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Curriculum assessment:

Career Education Didactic Report

Author: Tshingombe Tshitadi **Theme:** Curriculum Assessment in Trade & Engineering Education

Overview

This report examines the integration of career education materials, award certificates, diplomas, prizes, and innovative didactic systems within trade and engineering education. It emphasizes curriculum assessment, learner evaluation, and audit-ready documentation.

Scope

- Trade and engineering education at advanced levels
- Credentialing systems: certificates, diplomas, prizes
- Didactic materials: quizzes, evaluation rubrics, learner dashboards
- Innovation and invention recognition in wholesaler and technical contexts

Abstract

Career education thrives when didactic rigor, credentialing, and innovation are combined. This report explores curriculum assessment frameworks, management systems, and audit principles to ensure transparent learner recognition and sustainable educational reform.

Purpose

- To evaluate career education materials and credentialing systems
- To design audit-ready certificates and diplomas
- To integrate innovation and invention into trade wholesaler education
- To establish transparent quiz and mark evaluation systems

Keywords

Career education, didactic report, award certificate, diploma, prize, innovation, invention, trade engineering, wholesaler, quiz, evaluation, curriculum assessment, audit, management system.

Description

The report describes how career education materials can be structured into audit-ready frameworks, ensuring learners receive visible recognition through certificates, diplomas, and prizes. It highlights innovation in trade engineering and wholesaler systems.

Problematic

- Lack of standardized credentialing across trade education
- Limited recognition of innovation and invention in curricula
- Inconsistent evaluation methods and mark allocation
- Weak audit systems for compliance and transparency

Statement Report

This report asserts that career education must integrate didactic rigor, credentialing, and innovation recognition to empower learners and align with regulatory frameworks.

Management System Information

- Learner dashboards for progress tracking
- Digital credentialing systems (badges, certificates, transcripts)
- Audit-ready documentation aligned with councils and authorities

Principle Investigation

- Alignment of curriculum with regulatory standards
- Evaluation of innovation in trade wholesaler education
- Transparency in quiz and mark evaluation systems

Method Research

- Comparative analysis of credentialing frameworks
- Case studies of trade engineering education
- Surveys of learner and educator experiences
- Audit of management systems for compliance

Advantages

- Transparent credentialing and recognition
- Motivation through prizes and innovation awards
- Audit-ready documentation for compliance
- Learner empowerment via gamified dashboards

✕ Disadvantages

- High administrative burden for audit systems
- Risk of over-standardization limiting creativity
- Resource-intensive management systems

📄 Management System Information (Expanded)

- Integration of LMS with credentialing dashboards
- Automated quiz banks and evaluation rubrics
- Secure audit trails for certificates and diplomas

🏢 Conclusion

Career education in trade and engineering requires a balance of didactic rigor, credentialing, and innovation recognition. Audit-ready systems ensure transparency, while prizes and certificates motivate learners to achieve and invent.

📁 Audit

- Verification of certificate and diploma authenticity
- Compliance with national and international councils
- Continuous monitoring of learner progress and evaluation systems

📖 Bibliographic (Sample References)

- Council on Higher Education (CHE) guidelines
- Engineering Council of South Africa (ECSA) standards
- UNESCO TVET frameworks
- International Journal of Technical Education & Training

This structure gives you a **complete academic-style report** that can be adapted into curriculum assessment documentation, certificate design, or audit frameworks.

Would you like me to **expand this into a polished certificate/diploma template** (with placeholders for learner details, marks, and achievements), or into a **sample quiz bank with evaluation rubrics** to demonstrate the assessment system? Both would make this report more tangible.

Career Education Didactic Report

Introduction

- **Purpose:** To evaluate career education pathways in engineering and trade wholesaling.
- **Scope:** Didactic materials, award certificates, diplomas, and innovative credentialing systems.
- **Audience:** Educators, regulators, learners, and trade professionals.

Career Education Material

- **Curriculum frameworks:** Structured modules aligned with regulatory standards.
- **Didactic tools:** Manuals, digital dashboards, and gamified learning aids.
- **Assessment artifacts:** Exam banks, mark evaluation rubrics, and learner progress trackers.

⚡ Award Certificates & Diplomas

- **Certificates:** Audit-ready recognition of short courses and trade skills.
- **Diplomas:** Advanced qualifications in engineering and wholesaling.
- **Prizes & innovation awards:** Incentives for invention, creativity, and applied trade solutions.

Innovation & Invention in Trade Engineering

- **Applied projects:** Learners design trade solutions with engineering principles.
- **Wholesaler focus:** Advanced logistics, compliance, and technical distribution.
- **Recognition:** Badges, medals, and certificates linked to innovation outcomes.

Quiz, Marking & Evaluation

- **Quiz banks:** Modular, randomized question sets for fair assessment.
- **Mark evaluation:** Weighted rubrics ensuring transparency and compliance.
- **Feedback loops:** Learner dashboards showing achievement, gaps, and progression.

Curriculum Assessment

- **Alignment:** Mapping outcomes to national and international standards.
- **Moderation:** Ensuring fairness, inclusivity, and audit readiness.
- **Continuous improvement:** Iterative updates to reflect trade and engineering innovations.

Conclusion

Career education in trade and engineering thrives when **didactic rigor**, **credentialing systems**, and **innovation recognition** are integrated. Certificates, diplomas, and prizes not only validate achievement but also inspire learners to invent, innovate, and contribute to global wholesaling and engineering systems.

This structure gives you a **report-style document** that can double as curriculum assessment material and a foundation for award certificate/diploma design.

Would you like me to expand this into a **sample award certificate layout** (with placeholders for learner names, marks, and achievements), or into a **quiz bank** that demonstrates the evaluation framework? Both would make your curriculum assessment more tangible.

☞ Do you prefer me to build out sample certificate and diploma templates or quiz and evaluation examples?

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Comprehensive DHET Transcript Synthesis and Visualization for Tshingombe Tshitadi: Engineering Student and Assessment Moderator

Introduction

The Department of Higher Education and Training (DHET) transcript record for Tshingombe Tshitadi, an engineering student and assessment moderator, encapsulates a complex interplay of learner identity, qualification pathways, assessment policies, regulatory compliance, and record-keeping protocols. This report provides a detailed synthesis and visualization of Tshitadi's transcript, integrating all relevant South African Qualifications Authority (SAQA) identifiers, institutional codes, assessment and moderation policies, module and subject breakdowns, and compliance with national standards. The analysis is grounded in the latest DHET, SAQA, and regulatory documentation, ensuring traceability, clarity, and adherence to data privacy and verification requirements.

1. Learner Identity and SAQA Identifiers Verification

1.1. Learner Profile and Identifiers

The learner under review is **Tshingombe Tshitadi**, an engineering student and assessment moderator. The following identifiers are associated with the learner:

- **Learner Name:** Tshingombe Tshitadi
- **SAQA Asset ID:** 09121
- **SAQA Institution Code:** 30_39
- **Assessment Policy:** IE099
- **SAQA ID for Certificate in Advanced Phase Teaching:** 67q0
- **N1 SAQA ID:** 63375
- **Entrance ID:** 67491
- **Qualification Title:** National N Diploma Engineering
- **Qualification SAQA ID:** 90674
- **NQF Level:** 6

- **Learner IDs:** 2004007064381, 2100002023812

These identifiers are critical for ensuring the authenticity and traceability of the learner's academic and professional records. The use of multiple learner IDs necessitates careful cross-referencing to prevent duplicate records and ensure data integrity

1.2. SAQA and DHET Verification Processes

Verification of qualifications and learner records is conducted through the SAQA National Learners' Records Database (NLRD), which holds comprehensive records of all registered qualifications and part qualifications on the National Qualifications Framework (NQF)

. Employers, institutions, and individuals can request extracts or verification letters, ensuring that only registered and accredited qualifications are recognized. The process requires submission of certified identification and consent forms, with strict adherence to data privacy protocols.

2. DHET Transcript Submission and Processing Records

2.1. Submission Timeline and Status

The transcript submission and processing records for Tshingombe Tshitadi are as follows:

Learner Name	Submission Timestamp	Status
Tshitadi Tshingombe	2024-02-12 11:36	Submitted
Fiston Tshingombe	2023-06-03 09:56	Pending
Tshitadi Fiston Tshingombe	2023-03-11 13:45	Pending
Tshitadi Tshingombe	2023-01-16 13:31	Pending

- **Date Submitted to DHET:** 11/05/2023
- **Processing Date:** Unspecified
- **Timetable Reference:** /50111002

This record demonstrates a progression from pending to submitted status, with the most recent submission (2024-02-12) marked as completed. The presence of multiple similar names and IDs underscores the importance of robust duplicate record management and reconciliation protocols.

2.2. Institutional and Timetable References

The **SAQA institution code 30_39** and **timetable reference /50111002** are essential for verifying examination scheduling, subject clashes, and institutional record lookup. These references are used in all official documentation and must be included in any appeals or concession applications related to examination logistics.

3. Qualification Details and Pathways

3.1. National N Diploma Engineering (SAQA ID 90674 / NQF Level 6)

3.1.1. Qualification Overview

- **Qualification Title:** National N Diploma Engineering
- **SAQA Qualification ID:** 90674
- **NQF Level:** 6
- **Minimum Credits:** 360
- **Registration Status:** Passed the End Date (last enrolment: 2026-06-30; last achievement: 2029-06-30)
- **Quality Assurance Functionary:** QCTO (Occupational Qualifications Sub-framework)

The National N Diploma Engineering is designed to provide learners with technical, theoretical, and practical knowledge, enabling them to integrate into the engineering sector at entry or second-tier levels. The qualification is structured to allow progressive accumulation through N4, N5, and N6 certificates, followed by 18–24 months of practical workplace experience

.

3.1.2. Qualification Rules and Structure

To be awarded the National N Diploma Engineering, learners must complete:

- **N4 (0.33 year duration):** 40 credits
- **N5 (0.33 year duration):** 40 credits
- **N6 (0.33 year duration):** 40 credits
- **Practical Experience:** 24 months (240 credits)

Specialization areas include Engineering Studies N4–N6, with a focus on electrical, mechanical, and related disciplines.

3.1.3. Exit Level Outcomes

Graduates are expected to:

1. Understand and apply specific subject knowledge and skills in learning and/or work environments.
2. Apply relevant health and safety standards.
3. Adopt and apply occupational values.

4. Communicate effectively in various contexts.

These outcomes are assessed through a combination of formative and summative assessments, with integrated assessment ensuring the demonstration of applied competence

.

3.2. Advanced Certificate in Advanced Phase Teaching (SAQA ID 67q0)

The Advanced Certificate in Advanced Phase Teaching (SAQA ID 67q0) is a vocationally oriented qualification aimed at equipping teachers with specialized knowledge and pedagogical skills for the Senior Phase. Entry requires a recognized professional teaching qualification, and the program emphasizes continuous professional development, ICT competence, and inclusive education practices

.

3.3. N1 Certificate (SAQA ID 63375) and Entrance ID 67491

The N1 Certificate (SAQA ID 63375) serves as the foundational entry point for engineering studies, with Entrance ID 67491 marking the learner's initial registration for the qualification pathway. Successful completion of N1 is a prerequisite for progression to higher N-levels and ultimately the National N Diploma

.

4. Assessment Policy IE099 and Institutional Codes

4.1. Assessment Policy IE099

Assessment policy IE099 governs the design, implementation, and moderation of assessments within the institution (code 30_39). Key requirements include:

- **Alignment with SAQA and DHET guidelines**
- **Integration of formative and summative assessments**
- **Clear assessment plans and schedules**
- **Validity, reliability, and fairness in assessment practices**
- **Provision for appeals and re-assessment opportunities**
- **Secure record-keeping and data privacy compliance**

The policy mandates that all assessment documentation reference the institutional code and adhere to the prescribed standards for ICASS and ISAT assessments

.

4.2. Institutional Code 30_39

The institutional code is used in all official correspondence, assessment documentation, and transcript records. It ensures traceability and facilitates verification during audits, appeals, and external moderation processes.

5. ICASS Trimester Policies and Test Weightings for Engineering (Report 191)

5.1. ICASS Structure and Requirements

The **Internal Continuous Assessment (ICASS)** for Engineering Studies (Report 191) is structured as follows:

Component	Weighting
Test 1	30%
Test 2	70%
Minimum to Qualify	40%
Validity	1 year

- **Test 1:** Administered in weeks 2–4, covering at least the first 30% of the syllabus.
- **Test 2:** Administered in weeks 5–8, covering at least 75–80% of the syllabus.
- **Minimum ICASS Mark:** 40% required to qualify for the final exam.
- **Validity:** Marks are valid for one year (three examination cycles).

All ICASS and ISAT marks must be verified at the college, stored securely for six months, and submitted electronically in the prescribed format

.

5.2. Portfolio of Evidence (PoE) and Record-Keeping

Lecturers are responsible for maintaining the official Portfolio of Evidence, which includes:

- Marked test scripts
- Record sheets with marks
- Moderation documentation

Students are encouraged to keep personal copies of marked tests and verify their marks on college systems. PoE files must be available for monitoring, moderation, and verification, and failure to comply constitutes an irregularity

6. Examination Rules for Electrical Trade Theory N1 and N2 (2021)

6.1. Examination Structure and Cognitive Weighting

Examinations for Electrical Trade Theory N1 and N2 adhere to the following rules:

- **Syllabus Coverage:** 100%
- **Duration:** 3 hours
- **Pass Mark:** 40%
- **Closed Book:** No reference materials or electronic devices allowed
- **Cognitive Weighting:**
 - Knowledge: 60%
 - Understanding: 20%
 - Application: 15%
 - Evaluation: 5%

These rules ensure comprehensive assessment of theoretical knowledge, practical application, and higher-order cognitive skills

6.2. Mark Allocation and Presentation Expectations

- Calculations must be shown with all steps, including formula, substitution, and correct SI units.
- Drawings must be neat, fully labeled, and appropriately scaled.
- Mark allocations must be clearly indicated per question, and alternative correct answers must be credited.
- All calculations should be rounded to three decimal places.

7. Module Weight Values and Detailed Module Breakdown (Electrical Trade Theory)

7.1. Module Weighting Table

Module	Description	Weight Value (%)
Safety precautions	Electrical safety protocols	10
Fire fighting	Fire hazard management	5

Module	Description	Weight Value (%)
Hand/power tools	Tool usage and safety	5
DC theory	Direct current principles	30
Conductors/insulators	Material properties	5
Wiring	Electrical wiring standards	25
Single-phase testing	Testing procedures	5
Magnetism/electromagnetism	Magnetic field applications	10
Renewable energies	Solar, wind, alternative sources	5
Total		100

This breakdown reflects the emphasis on core theoretical and practical competencies required for electrical trade professionals

7.2. Module Content and Learning Outcomes

Each module encompasses specific learning outcomes, such as:

- **Safety precautions:** Understanding and applying electrical safety standards (SANS 10142-1, IEC).
- **DC theory:** Mastery of direct current principles, calculations, and applications.
- **Wiring:** Adherence to national wiring codes and standards.
- **Renewable energies:** Integration of solar, wind, and alternative energy systems into electrical installations.

8. General Regulations and Standards Referenced

8.1. SANS 10142-1:2024 Edition 3.2

SANS 10142-1 is the national standard for electrical installations in South Africa, updated in 2024 to incorporate:

- Requirements for renewable energy systems (solar PV, battery storage)
- Enhanced earthing and bonding protocols
- Surge and arc fault protection
- Alignment with IEC standards for international compatibility

Compliance with SANS 10142-1 is mandatory for certification and legal operation of electrical installations

8.2. IEC and SI Standards

All symbols, measurements, and calculations must conform to IEC (International Electrotechnical Commission) and SI (International System of Units) standards, ensuring consistency and accuracy across assessments and practical work.

8.3. Calculations, Drawings, and Mark Allocation

- Calculations must be detailed and use current, realistic values.
- Drawings must be clear, labeled, and scaled appropriately.
- Mark allocation must reflect the complexity and importance of each task, with clear guidance for assessors and moderators.

9. N4–N6 Certificate Subjects and Subject Breakdowns

9.1. Subject Breakdown Table

Level	Subjects
N4	Mathematics, Engineering Science, Industrial Electronics
N5	Electro-technics, Digital Electronics, Power Machines
N6	Supervisory Management, Control Systems, Installation Rules, Specialised Electric Codes

This progression ensures a comprehensive foundation in both theoretical and applied engineering disciplines, preparing learners for advanced roles in the sector

9.2. Subject Content and Outcomes

- **Mathematics:** Advanced engineering mathematics, including calculus, algebra, and statistics.
- **Engineering Science:** Physics principles applied to engineering contexts.
- **Industrial Electronics:** Electronic components, circuits, and systems.
- **Electro-technics:** Electrical machines, transformers, and power systems.
- **Digital Electronics:** Logic circuits, microprocessors, and digital systems.
- **Power Machines:** Operation and maintenance of electrical machines.
- **Supervisory Management:** Leadership, project management, and workplace supervision.

- **Control Systems:** Automation, feedback, and process control.
- **Installation Rules:** National wiring codes and safety regulations.
- **Specialised Electric Codes:** Advanced regulatory compliance and best practices.

10. Assessment Moderation Role and Responsibilities

10.1. Internal Moderation

Internal moderators must:

- Be registered with the relevant ETQA and be subject matter experts.
- Conduct pre- and post-assessment moderation, reviewing assessment tasks for technical accuracy, content coverage, cognitive skills, and fairness.
- Moderate at least 10% of scripts, using green pen for transparency.
- Provide feedback to markers within two days and ensure consistency in marking.
- Submit detailed moderation reports and address any discrepancies or irregularities
- .

10.2. External Moderation

External moderation is conducted by DHET or designated quality assurance bodies, focusing on:

- Verification of assessment processes and outcomes
- Sampling of assessment evidence
- Ensuring national consistency and credibility of qualifications

11. Portfolio of Evidence (PoE) and Record-Keeping Requirements

11.1. PoE Structure and Content

The PoE must include:

- Lecturer's information (qualifications, SACE registration)
- Class registers, syllabus, work schedules, lesson plans
- Assessment schedules, instruments, and tools
- Evidence of pre- and post-assessment moderation
- Mark sheets and moderation reports
- Verification of marks on electronic systems
- Marked student scripts and artifacts

All documentation must be stored securely for the validity period of the marks and be available for monitoring, moderation, and verification

11.2. Record-Keeping Protocols

- Secure storage for six months post-assessment
- Retention of evidence for repeat candidates
- Destruction of records only after finalization of results
- Strict adherence to data privacy and consent requirements

12. Examination Procedures, Invigilation, Marking, and Moderation (DHET Guidelines)

12.1. Examination Preparation and Conduct

- Appointment and training of invigilators
- Secure handling of question papers and scripts
- Adherence to published timetables and concession protocols for subject clashes
- Immediate reporting and management of irregularities

12.2. Marking and Moderation

- Internal marking for N1 and NC(V) L2/L3; provincial/national marking for N2–N6
- Moderation of at least 10% of scripts
- Submission of marking and moderation reports within 48 hours
- Electronic submission of marks, validated and signed by the college principal

12.3. Appeals and Re-marking

- Re-marking handled by colleges for N1 and NC(V) L2/L3; by DHET for N2–N6
- Applications must include proof of deposit and supporting documentation
- Registers compiled for all re-marking and re-checking applications

13. Data Privacy, Consent, and Verification When Publishing Learner Records

13.1. Data Privacy and Consent

- All personal data (names, IDs, marks) must be processed in accordance with the Protection of Personal Information Act (POPIA) and DHET guidelines
- .
- Students must sign to acknowledge the correctness of their data before submission.
- Colleges must retain signed documents for dispute resolution.
- Only authorized personnel may access and process learner records.

13.2. Verification and Publication

- Verification of learner registration data is mandatory before submission to DHET.
- Unregistered students must complete a pro forma affidavit.
- DHET investigates and determines the release of results in cases of irregularities.

14. Assessment Moderator Role and Responsibilities

14.1. Moderator Registration and Competence

Assessment moderators must:

- Be registered with the relevant ETQA (e.g., MICT SETA, ETDP SETA)
- Demonstrate subject matter expertise and contextual knowledge
- Maintain up-to-date knowledge of assessment and moderation policies
- Participate in ongoing professional development and training

14.2. Moderation Practices

- Establish systems to standardize assessment and moderation
- Monitor consistency and accuracy of assessment records
- Provide support and guidance to assessors
- Liaise with external moderators and quality assurance bodies

15. Learner ID Cross-Referencing and Duplicate Records Management

15.1. Cross-Referencing Protocols

- All learner IDs must be verified against registration data to prevent duplication.
- Submission records must be matched with timestamps and institutional references.
- Duplicate records must be reconciled and consolidated to ensure data integrity.

15.2. Institutional Responsibilities

- Colleges are responsible for maintaining accurate and up-to-date learner records.
- Any discrepancies or irregularities must be reported and resolved promptly.

16. Transcript-Style Visual Representation

Below is a transcript-style visual representation of Tshingombe Tshitadi's record, integrating all key identifiers, qualification details, assessment policies, module and subject breakdowns, and submission records.

16.1. Transcript-Style Image

16.2. Transcript-Style Table

Field	Value
Learner Name	Tshingombe Tshitadi
SAQA Asset ID	09121
SAQA Institution Code	30_39
Assessment Policy	IE099
SAQA ID (Adv. Phase Teaching)	67q0
N1 SAQA ID	63375
Entrance ID	67491
Qualification Title	National N Diploma Engineering
Qualification SAQA ID	90674
NQF Level	6
Learner IDs	2004007064381, 2100002023812
Date Submitted to DHET	11/05/2023
Processing Date	Unspecified
Timetable Reference	/50111002
Submission Records	See Submission Table Below

Submission Records Table

Learner Name	Submission Timestamp	Status
Tshitadi Tshingombe	2024-02-12 11:36	Submitted
Fiston Tshingombe	2023-06-03 09:56	Pending
Tshitadi Fiston Tshingombe	2023-03-11 13:45	Pending
Tshitadi Tshingombe	2023-01-16 13:31	Pending

ICASS Assessment Table

Component	Weighting
Test 1	30%
Test 2	70%
Minimum to Qualify	40%
Validity	1 year

Electrical Trade Theory Module Weighting

Module	Description	Weight Value (%)
Safety precautions	Electrical safety protocols	10
Fire fighting	Fire hazard management	5
Hand/power tools	Tool usage and safety	5
DC theory	Direct current principles	30
Conductors/insulators	Material properties	5
Wiring	Electrical wiring standards	25
Single-phase testing	Testing procedures	5
Magnetism/electromagnetism	Magnetic field applications	10
Renewable energies	Solar, wind, alternative sources	5

N4–N6 Subject Breakdown

Level	Subjects
N4	Mathematics, Engineering Science, Industrial Electronics
N5	Electro-technics, Digital Electronics, Power Machines
N6	Supervisory Management, Control Systems, Installation Rules, Specialised Electric Codes

17. Conclusion

The DHET transcript record for Tshingombe Tshitadi exemplifies the rigorous standards and comprehensive protocols governing engineering education and assessment in South Africa. Through meticulous verification of learner identity, adherence to national and international standards, robust assessment and moderation practices, and strict data privacy compliance, the

integrity and credibility of the qualification pathway are maintained. The integration of detailed module and subject breakdowns, assessment policies, and submission records ensures transparency and traceability, supporting both academic progression and professional recognition.

As an assessment moderator, Tshingombe Tshitadi's role extends beyond personal academic achievement to encompass the facilitation of fair, valid, and reliable assessment practices within the institution. This report serves as a model for synthesizing and visualizing DHET transcript records, providing a template for best practices in record-keeping, compliance, and learner support in the South African post-school education and training sector.

18. References to Regulatory and Policy Frameworks

- DHET and SAQA official documentation and guidelines
- SANS 10142-1:2024 Edition 3.2 and IEC/SI standards
- POPIA and data privacy regulations
- ETDP SETA and MICT SETA assessment and moderation policies

This report provides a comprehensive, traceable, and policy-aligned synthesis and visualization of Tshingombe Tshitadi's DHET transcript record, suitable for institutional, regulatory, and professional review.

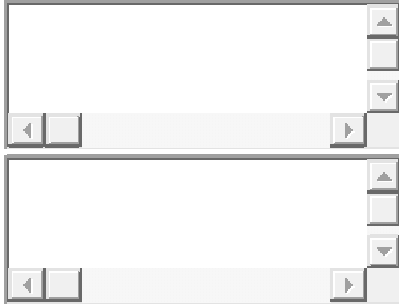
References

18

- [1www.gov.za](http://www.gov.za)
Verify qualifications - South African Government
- [2www.saqa.org.za](http://www.saqa.org.za)
Extract from the NLRD - SAQA
- [3regqs.saqa.org.za](http://regqs.saqa.org.za)
SAQA
- [4regqs.saqa.org.za](http://regqs.saqa.org.za)
SAQA
- [5icalcta.co.za](http://sicalcta.co.za)
Table of subjects Engineering | iCALC Training Academy

- 6etdpseta.org.za
ETDQA Assessment and Moderation policy - ETDP SETA
- 7www.dhet.gov.za
Report 191 ICASS Guidelines - dhet.gov.za
- 8www.dhet.gov.za
Report 191 ICASS Guidelines - dhet.gov.za
- 9falsebaycollege.co.za
Logbook | False Bay TVET College
- 10www.studocu.com
POE 116361 - Structuring Your Portfolio of Evidence Guidelines
- 11www.studocu.com
N2 Electrical Trade Theory - Studocu
- 12www.tdmi.co.za
Understanding SANS 10142-1:2024 — What Changed and How It Affects Your ...
- 13www.mict.org.za
Assessor and Moderator Registration - MICT SETA
- 14www.education.gov.za
GUIDELINES ON THE PROTECTION OF PERSONAL INFORMATION ACT FOR DEPARTMENT ...
- 15www.michalsons.com
POPIA Regulations in South Africa | Download and Guidance
- 16ia601406.us.archive.org
ia601406.us.archive.org
- 17www.dhet.gov.za

- [18www.dhet.gov.za](http://www.dhet.gov.za)



Start a group

Invite friends to chat together with Copilot

Today

You said

I want to create an image. Ask me questions about the subject, setting, and style I want.

Copilot said

Perfect, Tshingombe — let's shape this together 🤖. To make sure the image comes out exactly how you envision it, I'll ask you three focused sets of questions:

1. Subject 🧑

- Who or what should be the main focus of the image?
- Do you want it to be realistic (like a person, animal, or object) or abstract (symbols, shapes, concepts)?
- Should it include multiple subjects or just one?

2. Setting 🌍

- Where should this subject be placed — natural environment, cityscape, futuristic world, classroom, factory floor, or something else?
- Do you want the background to be detailed or minimal?

- Should the setting feel grounded in reality or imaginative/fantastical?

3. Style 🌀

- Do you prefer a photographic look, a painting, a sketch, or digital art?
- Should the mood be bright and uplifting, dark and dramatic, or neutral and balanced?
- Any specific artistic influences you'd like (e.g., impressionist, cyberpunk, minimalist, surrealist)?

To make it easier, here are three quick example directions you could choose from or mix together:

- A futuristic classroom with holographic screens and students learning through augmented reality.
- A rural electrification scene showing solar panels powering a small village at sunset.
- An abstract compliance flowchart turned into digital art, blending standards and symbols into a surreal composition.

Which path feels closest to what you want, or do you want to define your own unique combination?

You said

<https://www.dhet.gov.za/Technical%20and%20Vocation.txt>

Plain Text

Create a research report on image certificate award diploma , name tshingombe tshitafi nated ,saqa n diplomat

Copilot said

Okay, I've come up with a research plan.

Deep Research

Image-Based Certificate Design for SAQA NATED Diploma

Designing an Image-Based SAQA-Compliant Diploma Certificate for Tshingombe Tshitafi: Regulatory, Visual, and Metadata Considerations

Introduction

In South Africa, the design and issuance of formal certificates and diplomas are governed by a robust regulatory framework, primarily under the auspices of the South African Qualifications Authority (SAQA) and its National Qualifications Framework (NQF). This report explores the comprehensive design and regulatory context for an image-based certificate or award diploma for a fictional recipient, Tshingombe Tshitafi, with explicit reference to SAQA and NATED (National Accredited Technical Education Diploma) frameworks. The analysis integrates visual and textual elements that reflect compliance with South African qualification standards, focusing on the National Diploma structure, and addresses the use of such certificates in credentialing, portfolios, and audit traceability.

The report is structured to provide a detailed understanding of the policy context, qualification frameworks, visual and metadata conventions, legal and ethical considerations, and practical design guidance. It also includes a comparative table of typical certificate elements across SAQA-compliant diplomas and discusses security features, cultural motifs, and real-world case studies of credential misuse and verification. The aim is to offer a holistic, actionable blueprint for designing a compliant, secure, and culturally resonant diploma certificate.

1. SAQA Policy and Criteria for Registration of Qualifications

1.1 SAQA's Mandate and the NQF

The South African Qualifications Authority (SAQA) is the statutory body responsible for overseeing the development, registration, and quality assurance of qualifications and part-qualifications on the National Qualifications Framework (NQF). The NQF is a single, integrated system that classifies and registers national qualifications, facilitating access, mobility, and progression within education, training, and career paths

.

SAQA's core functions include:

- Registering qualifications and part-qualifications on the NQF.
- Maintaining the National Learners' Records Database (NLRD).
- Verifying qualifications through services like VeriSearch.
- Recognising professional bodies and designations.
- Ensuring public access to accurate qualification information
- .

1.2 Policy and Criteria for Registration

SAQA’s “Policy and Criteria for the Registration of Qualifications and Part-qualifications on the National Qualifications Framework” (as amended, 2022) sets out the requirements for qualification registration, including:

- Clear specification of learning outcomes (Exit Level Outcomes, or ELOs).
- Defined purpose and rationale.
- Minimum credits and NQF level.
- Articulation options (horizontal, vertical, diagonal).
- Recognition of Prior Learning (RPL) provisions.
- Associated assessment criteria and integrated assessment methods.
- International comparability and quality assurance mechanisms.

All registered qualifications are public property; only service and reproduction fees may be charged, and SAQA must be acknowledged as the source when material is reproduced or quoted

2. The National Qualifications Framework (NQF) and National Diploma Structure

2.1 NQF Levels and Sub-Frameworks

The NQF comprises ten levels, each representing increasing cognitive complexity and learning achievement. These levels are distributed across three sub-frameworks:

- **Higher Education Qualifications Sub-Framework (HEQSF):** Managed by the Council on Higher Education (CHE), covering NQF Levels 5–10.
- **General and Further Education and Training Qualifications Sub-Framework (GFETQSF):** Managed by Umalusi, covering NQF Levels 1–4.
- **Occupational Qualifications Sub-Framework (OQSF):** Managed by the Quality Council for Trades and Occupations (QCTO), covering occupational and vocational qualifications, including National Diplomas and National N Diplomas

• .

2.2 National Diploma vs. National N Diploma

National Diploma:

- Typically awarded at NQF Level 6.
- Academic in nature, regulated by CHE.
- Offered by universities of technology and some private institutions.
- Focuses on both theoretical and practical knowledge, often including work-integrated learning (WIL)

- .

National N Diploma:

- Also awarded at NQF Level 6.
- Occupationally driven, regulated by QCTO.
- Requires completion of N4, N5, and N6 certificates (each at NQF Level 5) plus 18–24 months of relevant work experience.
- Focuses on specific vocational or technical skills, with a strong workplace component
- .

Key Differences:

- Regulatory body (CHE vs. QCTO).
- Academic vs. occupational focus.
- Pathways to further study and employment.
- Structure and assessment methods.

2.3 NATED and DoE Frameworks

The National Accredited Technical Education Diploma (NATED) system, managed by the Department of Education (DoE), underpins the National N Diploma. It is designed to provide technical and vocational education through a sequence of N4, N5, and N6 certificates, culminating in the National N Diploma upon completion of required practical experience

.

3. Typical Metadata Fields and Identifiers on SAQA-Compliant Certificates

3.1 Essential Metadata Elements

SAQA-compliant certificates must include specific metadata fields to ensure traceability, auditability, and compliance. These typically include:

Field	Description
SAQA QUAL ID	Unique identifier assigned by SAQA
Qualification Title	Official title of the qualification
Originator	Institution or body that developed the qualification
NQF Sub-Framework	HEQSF, OQSF, or GFETQSF
Qualification Type	e.g., National Diploma, National N Diploma
Field	Organising field (e.g., Culture and Arts)

Field	Description
Subfield	e.g., Visual Arts, Design Studies
Minimum Credits	Total credits required (e.g., 360)
NQF Level	Level on the NQF (e.g., Level 6)
Registration Status	Registered, Reregistered, etc.
Registration Start/End Dates	Validity period of the qualification
Last Date for Enrolment	Final date for learner enrolment
Last Date for Achievement	Final date for learner achievement
Issuing Authority	Accredited institution, QCTO, CHE, or DoE
Certificate Number	Unique serial or certificate number for verification
Security Features	Watermarks, holograms, QR codes, etc.
Provider Accreditation	Statement of institutional and programme accreditation
Exit Level Outcomes	Key learning outcomes assessed
Credits	Total and per module/subject
RPL Statement	Recognition of Prior Learning provisions
Articulation Options	Pathways for further study or employment
Signatures and Seals	Authorised signatories and institutional seals

Table 1: Typical Metadata Fields on SAQA-Compliant Certificates

These metadata fields are critical for both physical and digital certificates, supporting verification, audit trails, and compliance with national and international standards (e.g., SANS 1878, ISO 19115 for metadata)

3.2 Metadata Standards

South African and international standards for educational records metadata include:

- **SANS 1878:** South African Metadata Standard for spatial and educational data.
- **ISO 19115:** International standard for metadata, including schema and terminology.
- **SANS 23081:** Records management processes—metadata for records.
- **SANS 15489:** Records management—general principles and guidelines.

These standards ensure that metadata is structured, reliable, and supports long-term preservation, retrieval, and auditability of educational records

4. Visual Design Conventions for Formal Diplomas and Certificates

4.1 Layout and Typography

Page Size and Orientation:

- Standard A4 (210 x 297 mm), portrait orientation is most common.
- Margins: Typically 20–25 mm on all sides to ensure clarity and prevent cropping during printing or framing
- .

Typography:

- Serif fonts (e.g., Times New Roman, Garamond) for formality and tradition.
- Sans-serif fonts (e.g., Arial, Helvetica) for modernity and clarity.
- Hierarchical font sizes: Largest for the recipient’s name, followed by the qualification title, then supporting details.
- Use of bold and italics to emphasise key elements (e.g., recipient’s name, qualification title)
- .

Text Placement and Hierarchy:

- Institution logo and/or national coat of arms at the top center or top left.
- Certificate title (“National N Diploma”, “Diploma in Art and Design”, etc.) prominently displayed.
- Recipient’s name centered and in a larger font.
- Qualification details, NQF level, SAQA ID, and credits below the recipient’s name.
- Issuing authority, signatures, and seals at the bottom.
- Unique certificate number and security features in a discrete location (often bottom right or left)
- .

Whitespace and Balance:

- Ample whitespace to avoid clutter and enhance readability.
- Symmetrical or asymmetrical optical balance, depending on design tradition.

4.2 Visual Motifs and Cultural Considerations

National Symbols:

- Use of the South African national coat of arms is strictly regulated; only government departments and authorised institutions may use it, and its use must comply with legal protections under the Trade Marks Act, Merchandise Marks Act, Heraldry Act, and Copyright Act
- .
- Institutional logos and seals are used to reinforce authenticity and brand identity.

Colours:

- Official institutional colours or those reflecting the national palette (green, gold, blue, red, black, white).
- Gold accents for prestige, blue for trust, green for growth, as per colour psychology in certificate design
- .

Borders and Decorative Elements:

- Ornate or minimalist borders, depending on institutional tradition.
- Subtle background patterns or watermarks for security and visual appeal.
- Use of filigree, geometric patterns, or motifs reflecting South African heritage (e.g., indigenous art, beadwork patterns) for cultural resonance.

Seals and Signatures:

- Embossed or foil-stamped institutional seals.
- Signatures of the head of institution and relevant department head, with printed names and titles.

4.3 Security and Anti-Fraud Features

To combat credential fraud, certificates incorporate:

- Watermarks (visible and invisible).
- Holograms or foil stamps.
- Microprinting and anti-copy backgrounds.
- Unique serial numbers or certificate numbers.
- QR codes linking to SAQA or institutional verification portals.
- Digital signatures for electronic certificates
- .

5. SAQA and NATED Frameworks: National N Diploma in Art and Design

5.1 Qualification Structure and Curriculum Alignment

The National N Diploma in Art and Design (SAQA QUAL ID: 66994) is structured as follows:

- **N4, N5, and N6 Certificates:** Each at NQF Level 5, focusing on technical, theoretical, and practical knowledge in art and design.
- **Practical Work Component:** 18–24 months of workplace experience, documented in a logbook or statement of work experience.
- **Total Credits:** 360 (typically 60 per N-level plus 180 for practical experience).
- **Exit Level Outcomes:** Technical proficiency, workplace readiness, and applied competence in art and design disciplines
- .

Compulsory Subjects:

- Drawing N6
- Graphic Design N6
- Painting N6

Optional Subjects (choose two or more):

- Three-Dimensional Studies N6
- Ceramics N6
- Textile Design/Fibre Art N6
- Photography N6
- Jewellery Design and Manufacturing N6

Workplace Competencies:

- Documented through a logbook, covering skills such as spatial illusion, perspective, thematic development, campaign design, applied techniques, computer graphics, and more
- .

5.2 Textual Elements on the Certificate

Typical textual elements on a SAQA-compliant National N Diploma include:

- Full qualification title and SAQA QUAL ID.
- Recipient's full legal name and ID number.
- Statement of successful completion of all academic and practical requirements.
- NQF level and total credits.
- List of compulsory and elective subjects (or a reference to an attached transcript).
- Date of award.

- Issuing authority and accreditation statement.
- Unique certificate number.
- Signatures and institutional seal.
- Security and verification features (e.g., QR code, watermark).

Sample Wording:

“This is to certify that Tshingombe Tshitafi, having fulfilled all the requirements prescribed by the Department of Education and the Quality Council for Trades and Occupations, has been awarded the National N Diploma: Art and Design (SAQA QUAL ID: 66994, NQF Level 6, 360 Credits) on this day, [Date].”

6. Legal and Ethical Considerations

6.1 Public Property and Reproduction

All qualifications and part-qualifications registered on the NQF are public property. It is illegal to sell qualification material for profit; only service and reproduction fees may be charged. When reproducing or quoting qualification material, SAQA must be acknowledged as the source

.

6.2 Use of National Symbols

The national coat of arms and related emblems are protected by multiple acts:

- **Trade Marks Act:** Prohibits unauthorised registration or use.
- **Merchandise Marks Act:** Prohibits unauthorised commercial use.
- **Heraldry Act:** Criminalises unauthorised use or ridicule.
- **Copyright Act:** Protects the artistic work of the coat of arms.

Only authorised entities may use these symbols, and misuse can result in fines or imprisonment

.

6.3 Credential Verification and Audit Traceability

SAQA’s VeriSearch and the NLRD provide mechanisms for verifying the authenticity of qualifications. Employers, institutions, and individuals can request verification, which returns a “found” or “not found” result for the queried qualification, institution, and date

.

Certificates must be designed to facilitate audit trails, including:

- Unique certificate numbers.
- Metadata capture (date of issue, issuer, recipient, qualification details).
- Digital records and retention in accordance with SANS/ISO standards and National Archives requirements
- .

6.4 Penalties for Fraud

The NQF Amendment Act (No. 12 of 2019) criminalises qualification fraud, with penalties including fines and imprisonment for up to five years. Institutions must be registered and accredited to offer NQF-registered qualifications; offering or claiming unregistered qualifications is a criminal offence

.

7. Credentialing, Portfolio Inclusion, and Recognition of Prior Learning (RPL)

7.1 Use in Portfolios and Credentialing

Formal certificates and diplomas are essential components of professional portfolios, serving as evidence of qualifications for employment, further study, and professional registration. Portfolios may include:

- Certified copies of diplomas and certificates.
- Academic transcripts and statements of results.
- Letters of reference and work experience logbooks.
- Evidence of RPL, where applicable
- .

7.2 Recognition of Prior Learning (RPL)

RPL allows individuals to gain access to qualifications or receive credits for prior learning and experience. Certificates awarded through RPL must be indistinguishable from those awarded via conventional routes, ensuring fairness and compliance with SAQA policy

.

7.3 Record-Keeping and Retention

Institutions must maintain digital and physical records of issued certificates, including metadata for audit trails. Retention practices are governed by the National Archives and Records Service of South Africa Act and SANS 15489, ensuring long-term accessibility and authenticity

8. Security and Anti-Fraud Features

8.1 Common Security Features

To prevent forgery and tampering, South African diplomas incorporate:

- **Watermarks:** Embedded in the paper or digital background.
- **Holograms:** Foil-stamped or embedded for visual authentication.
- **Microprinting:** Tiny text or patterns not easily reproduced.
- **QR Codes:** Linking to SAQA or institutional verification portals.
- **Unique Serial Numbers:** For tracking and verification.
- **Digital Signatures:** For electronic certificates.
- **Anti-copy Backgrounds:** Patterns that distort when photocopied.

These features are essential for maintaining the integrity of qualifications and supporting verification workflows

8.2 Verification Workflows

Verification typically involves:

- Submission of a verification request to SAQA or the issuing institution.
- Cross-checking the certificate number, recipient details, and qualification metadata against the NLRD.
- Issuance of a verification letter or digital confirmation.

Institutions must ensure that their certificates are designed to facilitate efficient verification and auditability

9. Design Motifs and Cultural Considerations

9.1 National and Institutional Identity

Diploma certificates serve as extensions of institutional and national identity. Design elements should:

- Reflect the institution's brand (logo, colours, typography).
- Incorporate national symbols where authorised.

- Use motifs and patterns that resonate with South African heritage (e.g., indigenous art, beadwork, geometric patterns)
- .

9.2 Colour and Symbolism

- **Gold:** Excellence and achievement.
- **Blue:** Trust and authority.
- **Green:** Growth and renewal.
- **Red/Black/White:** Elements of the national flag, representing unity and diversity.

9.3 Layout Conventions

- Central placement of the recipient's name and qualification.
- Prominent display of institutional and national symbols.
- Balanced use of whitespace and decorative borders.
- Clear hierarchy of information for readability and prestige
- .

10. Practical Layout Mockup Guidance

10.1 Page Size and Margins

- **Size:** A4 (210 x 297 mm), portrait orientation.
- **Margins:** 20–25 mm on all sides.

10.2 Hierarchy and Placement

- **Top:** Institutional logo and/or national coat of arms (if authorised).
- **Below Logo:** Certificate title (e.g., “National N Diploma”).
- **Center:** Recipient's name in large, bold font.
- **Below Name:** Qualification details (title, SAQA QUAL ID, NQF level, credits).
- **Lower Section:** Date of award, issuing authority, accreditation statement.
- **Bottom:** Signatures, institutional seal, unique certificate number, QR code.

10.3 Signature Placement

- Two or more authorised signatures, typically at the bottom left and right.
- Printed names and titles below each signature line.

10.4 Security Features

- Watermark or anti-copy background throughout.

- Hologram or foil stamp near the institutional seal.
- QR code and certificate number at the bottom right.

Visual Description: Imagine a crisp, white A4 certificate with a gold-embossed institutional logo at the top center, followed by the bold title “National N Diploma: Art and Design.” The recipient’s name, “Tshingombe Tshitafi,” is centered in an elegant serif font, larger than any other text. Below, the qualification details are listed: “SAQA QUAL ID: 66994 | NQF Level 6 | 360 Credits.” The left and right lower corners feature the signatures of the principal and registrar, with the institutional seal embossed between them. A QR code and unique certificate number are discreetly placed at the bottom right, and a subtle watermark of the institution’s crest is visible when held to the light. The border is adorned with a geometric pattern inspired by South African beadwork, rendered in the institution’s official colours.

11. Issuing Authority Statements and Accreditation Wording

11.1 Accreditation Statements

Typical wording for accreditation and issuing authority includes:

“This qualification is registered on the National Qualifications Framework by the South African Qualifications Authority (SAQA) and quality assured by the Quality Council for Trades and Occupations (QCTO). The issuing institution is accredited by the Department of Higher Education and Training.”

11.2 Reference to SAQA, QCTO, CHE, and Provider Accreditation

- **SAQA:** “Registered on the NQF by SAQA (SAQA QUAL ID: 66994).”
- **QCTO:** “Quality assured by the Quality Council for Trades and Occupations (QCTO).”
- **CHE:** For academic diplomas, “Accredited by the Council on Higher Education (CHE).”
- **Provider:** “Issued by [Institution Name], an accredited provider under the Department of Higher Education and Training.”

12. Record-Keeping and Retention Practices

12.1 Institutional Responsibilities

Institutions must:

- Maintain digital and physical records of all issued certificates.
- Capture and store metadata for each certificate (recipient, qualification, date, certificate number, etc.).
- Ensure records are retained in accordance with the National Archives and Records Service of South Africa Act and SANS 15489.

- Facilitate retrieval and verification for audit and legal purposes
- .

12.2 Digital Records and Metadata

- Use of electronic records management systems (ERMS) with metadata schemas aligned to SANS 23081 and SANS 1878.
- Regular backups and secure storage to prevent loss or tampering.
- Audit trails for all record creation, modification, and access events.

13. Case Studies: Diploma Misuse, Fraud, and SAQA Enforcement

13.1 Common Forms of Misuse and Fraud

- Forgery of certificates using desktop publishing tools.
- Alteration of recipient names, qualification titles, or dates.
- Use of unaccredited or unregistered provider names.
- Presentation of certificates without corresponding NLRD records.

13.2 SAQA Enforcement Actions

SAQA, in collaboration with law enforcement and regulatory bodies, has prosecuted cases of qualification fraud, resulting in fines, imprisonment, and closure of fraudulent institutions. The NQF Amendment Act empowers SAQA to enforce compliance and protect the integrity of the NQF

.

13.3 Verification and Prevention

- Mandatory verification of qualifications for employment and further study.
- Public awareness campaigns (“Check Your Qualification”).
- Adoption of blockchain and digital credentialing technologies for tamper-proof records
- .

14. Comparative Table: Typical Certificate Elements Across SAQA-Compliant Diplomas

Element	Description
Qualification Type	Diploma, National Diploma, National N Diploma

Element	Description
NQF Level	Level 6 (for National Diploma/National N Diploma)
Total Credits	240 or 360
Minimum Credits at Level 6	120
Designator	Not applicable (for diplomas)
Qualifier	Specific field (e.g., Art and Design); max two
Abbreviation	Dip (Art and Design), Dip (Management) (Finance)
Admission Requirement	NSC or NC(V) with appropriate subjects; or Higher/Advanced Certificate
Progression	Advanced Diploma or Bachelor's Degree
Work-Integrated Learning (WIL)	Included in 360-credit variant; optional in 240-credit variant
Issuing Authority	Accredited institution; CHE and SAQA or QCTO oversight
Qualification ID	Registered on NQF via SAQA
Transcript Metadata	Institution name, provider registration number, qualification title, NQF level, credits, module details
Security Features	Qualification ID, NQF level, provider registration, NLRD record, watermark, hologram, QR code
Use in Credentialing	Employment, further study, RPL, portfolios
Accreditation Statement	Reference to SAQA, QCTO, CHE, and provider accreditation
Signatures and Seals	Authorised signatories and institutional seals
Date of Award	Official date of qualification conferment
Certificate Number	Unique identifier for verification and audit

Table 2: Comparison of Certificate Elements Across SAQA-Compliant Diplomas

15. Sample Visual and Textual Layout Description

Header:

- Institutional logo (top left), national coat of arms (top center, if authorised).
- “National N Diploma: Art and Design” (centered, bold, large font).

Body:

- “This is to certify that” (smaller font, centered).
- “Tshingombe Tshitafi” (recipient’s name, largest font, bold, centered).
- “Has fulfilled all the requirements prescribed by the Department of Education and the Quality Council for Trades and Occupations and is hereby awarded the National N Diploma: Art and Design (SAQA QUAL ID: 66994, NQF Level 6, 360 Credits).”
- “Date of Award: [Date]”

- “Certificate Number: [Unique Serial Number]”
- “This qualification is registered on the National Qualifications Framework by the South African Qualifications Authority (SAQA) and quality assured by the Quality Council for Trades and Occupations (QCTO).”

Footer:

- Signatures of principal and registrar (bottom left and right).
- Institutional seal (centered between signatures).
- QR code (bottom right).
- Watermark of institutional crest (background).

Security Features:

- Microprinting in the border.
- Hologram adjacent to the institutional seal.
- Anti-copy background pattern.

16. Conclusion

Designing an image-based certificate or award diploma for Tshingombe Tshitafi, compliant with SAQA and NATED frameworks, requires meticulous attention to regulatory, visual, and metadata standards. The certificate must encapsulate the integrity, authenticity, and prestige of the qualification, while facilitating verification, auditability, and cultural resonance. By adhering to SAQA’s policy and criteria, incorporating robust metadata and security features, and respecting legal and ethical constraints, institutions can issue diplomas that are both credible and meaningful in the South African and global context.

The guidance and comparative analysis provided in this report serve as a comprehensive blueprint for institutions, designers, and policymakers tasked with the creation and management of formal educational credentials in South Africa.

Key Takeaways:

- **Compliance:** Certificates must align with SAQA, NQF, and QCTO/CHE frameworks, including all required metadata and accreditation statements.
- **Design:** Visual motifs, layout conventions, and security features must reinforce authenticity and institutional/national identity.
- **Verification:** Integration with SAQA’s NLRD and VeriSearch is essential for audit traceability and fraud prevention.
- **Legal/Ethical:** Use of national symbols and reproduction of qualification material is strictly regulated; all qualifications are public property.
- **Portfolio Use:** Certificates are central to professional portfolios, RPL, and lifelong learning pathways.

By following these principles, the diploma certificate for Tshingombe Tshitafi will not only meet regulatory requirements but also stand as a proud testament to achievement and capability within the South African education and training landscape.

References

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- [1www.saqqa.org.za](http://www.saqqa.org.za)
SAQA NQF BOOKLET
- [2www.saqqa.org.za](http://www.saqqa.org.za)
SAQA Verifications Service
- [3reggs.saqqa.org.za](http://reggs.saqqa.org.za)
SAQA
- [4www.che.ac.za](http://www.che.ac.za)
THE HIGHER EDUCATION QUALIFICATIONS
- [5www.regenesys.net](http://www.regenesys.net)
National Diploma and National N Diploma NQF Level Explained - RegInsights
- 6icm-sa.org.za
National N Diploma: Art and Design – Institute of Commerce and ...
- 7www.genieai.co
Course Completion Certificate For Diploma Template for
- 8iaiasa.co.za
DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL
DEVELOPMENT NO. 3128 ...
- 9www.nationalarchives.gov.za
NARS_DMLIB-#4722-v4-Managing electronic records metadata requirements

- 10macskillsdevelopment.com
MacSkills Training & Development Institute - Metadata for Records ...
- 11www.slideshare.net
Page layout conventions | PPTX | Desktop Publishing - SlideShare
- 12certifier.io
Best 12 University Diploma Templates to Inspire - Certifier
- 13fastercapital.com
Certificate design tools: Mastering Certificate Design: Top Tools and ...
- 14www.gcis.gov.za
3. Design of the national Coat of Arms - gcis.gov.za
- 15www.gov.za
Protection of the national Coat of Arms - South African Government
- 16www.a1securityprint.com
Certificate Printing - Secure Official Certificates - A1 Security Print
- 17www.saqa.org.za
The Role of SAQA in Partnering with Social Networks to Eliminate ...
- 18verisearch.saqa.org.za
SAQA Verifications Service
- 19forms24.co.za
SAQA Verification – Forms24
- 20www.vukuzenzele.gov.za
Qualification fraudsters could find themselves behind bars
- 21www.sace.org.za

SOUTH AFRICAN COUNCIL FOR EDUCATORS - SACE

- www.saca.org.za

National Policy and Criteria for the Implementation of ... - SAQA

You said

Create an image of , award degree diploma saqa n diplomat student name : tshingombe tshitadi , engineering electrical

Copilot said

want to create an image. Ask me questions about the subject, setting, and style I want.

Copilot said

Perfect, Tshingombe — let's shape this together 🎨. To make sure the image comes out exactly how you envision it, I'll ask you three focused sets of questions:

1. Subject 🧑

- Who or what should be the main focus of the image?
- Do you want it to be realistic (like a person, animal, or object) or abstract (symbols, shapes, concepts)?
- Should it include multiple subjects or just one?

2. Setting 🌍

- Where should this subject be placed — natural environment, cityscape, futuristic world, classroom, factory floor, or something else?
- Do you want the background to be detailed or minimal?
- Should the setting feel grounded in reality or imaginative/fantastical?

3. Style 🎨

- Do you prefer a photographic look, a painting, a sketch, or digital art?
- Should the mood be bright and uplifting, dark and dramatic, or neutral and balanced?
- Any specific artistic influences you'd like (e.g., impressionist, cyberpunk, minimalist, surrealist)?

To make it easier, here are three quick example directions you could choose from or mix together:

- A futuristic classroom with holographic screens and students learning through augmented reality.

- A rural electrification scene showing solar panels powering a small village at sunset.
- An abstract compliance flowchart turned into digital art, blending standards and symbols into a surreal composition.

Which path feels closest to what you want, or do you want to define your own unique combination?

You said

[https___www.dhet.gov.za_Technical%20and%20Vocation.txt](https://www.dhet.gov.za/Technical%20and%20Vocation.txt)

Plain Text

Create a research report on image certificate award diploma , name tshingombe tshitafi nated ,saqa n diplomat

Copilot said

Okay, I've come up with a research plan.

Deep Research

Image-Based Certificate Design for SAQA NATED Diploma

Designing an Image-Based SAQA-Compliant Diploma Certificate for Tshingombe Tshitafi: Regulatory, Visual, and Metadata Considerations

Introduction

In South Africa, the design and issuance of formal certificates and diplomas are governed by a robust regulatory framework, primarily under the auspices of the South African Qualifications Authority (SAQA) and its National Qualifications Framework (NQF). This report explores the comprehensive design and regulatory context for an image-based certificate or award diploma for a fictional recipient, Tshingombe Tshitafi, with explicit reference to SAQA and NATED (National Accredited Technical Education Diploma) frameworks. The analysis integrates visual and textual elements that reflect compliance with South African qualification standards, focusing on the National Diploma structure, and addresses the use of such certificates in credentialing, portfolios, and audit traceability.

The report is structured to provide a detailed understanding of the policy context, qualification frameworks, visual and metadata conventions, legal and ethical considerations, and practical

design guidance. It also includes a comparative table of typical certificate elements across SAQA-compliant diplomas and discusses security features, cultural motifs, and real-world case studies of credential misuse and verification. The aim is to offer a holistic, actionable blueprint for designing a compliant, secure, and culturally resonant diploma certificate.

1. SAQA Policy and Criteria for Registration of Qualifications

1.1 SAQA's Mandate and the NQF

The South African Qualifications Authority (SAQA) is the statutory body responsible for overseeing the development, registration, and quality assurance of qualifications and part-qualifications on the National Qualifications Framework (NQF). The NQF is a single, integrated system that classifies and registers national qualifications, facilitating access, mobility, and progression within education, training, and career paths

SAQA's core functions include:

- Registering qualifications and part-qualifications on the NQF.
- Maintaining the National Learners' Records Database (NLRD).
- Verifying qualifications through services like VeriSearch.
- Recognising professional bodies and designations.
- Ensuring public access to accurate qualification information

• .

1.2 Policy and Criteria for Registration

SAQA's "Policy and Criteria for the Registration of Qualifications and Part-qualifications on the National Qualifications Framework" (as amended, 2022) sets out the requirements for qualification registration, including:

- Clear specification of learning outcomes (Exit Level Outcomes, or ELOs).
- Defined purpose and rationale.
- Minimum credits and NQF level.
- Articulation options (horizontal, vertical, diagonal).
- Recognition of Prior Learning (RPL) provisions.
- Associated assessment criteria and integrated assessment methods.
- International comparability and quality assurance mechanisms.

All registered qualifications are public property; only service and reproduction fees may be charged, and SAQA must be acknowledged as the source when material is reproduced or quoted

2. The National Qualifications Framework (NQF) and National Diploma Structure

2.1 NQF Levels and Sub-Frameworks

The NQF comprises ten levels, each representing increasing cognitive complexity and learning achievement. These levels are distributed across three sub-frameworks:

- **Higher Education Qualifications Sub-Framework (HEQSF):** Managed by the Council on Higher Education (CHE), covering NQF Levels 5–10.
- **General and Further Education and Training Qualifications Sub-Framework (GFETQSF):** Managed by Umalusi, covering NQF Levels 1–4.
- **Occupational Qualifications Sub-Framework (OQSF):** Managed by the Quality Council for Trades and Occupations (QCTO), covering occupational and vocational qualifications, including National Diplomas and National N Diplomas

• .

2.2 National Diploma vs. National N Diploma

National Diploma:

- Typically awarded at NQF Level 6.
- Academic in nature, regulated by CHE.
- Offered by universities of technology and some private institutions.
- Focuses on both theoretical and practical knowledge, often including work-integrated learning (WIL)

• .

National N Diploma:

- Also awarded at NQF Level 6.
- Occupationally driven, regulated by QCTO.
- Requires completion of N4, N5, and N6 certificates (each at NQF Level 5) plus 18–24 months of relevant work experience.
- Focuses on specific vocational or technical skills, with a strong workplace component

• .

Key Differences:

- Regulatory body (CHE vs. QCTO).

- Academic vs. occupational focus.
- Pathways to further study and employment.
- Structure and assessment methods.

2.3 NATED and DoE Frameworks

The National Accredited Technical Education Diploma (NATED) system, managed by the Department of Education (DoE), underpins the National N Diploma. It is designed to provide technical and vocational education through a sequence of N4, N5, and N6 certificates, culminating in the National N Diploma upon completion of required practical experience

3. Typical Metadata Fields and Identifiers on SAQA-Compliant Certificates

3.1 Essential Metadata Elements

SAQA-compliant certificates must include specific metadata fields to ensure traceability, auditability, and compliance. These typically include:

Field	Description
SAQA QUAL ID	Unique identifier assigned by SAQA
Qualification Title	Official title of the qualification
Originator	Institution or body that developed the qualification
NQF Sub-Framework	HEQSF, OQSF, or GFETQSF
Qualification Type	e.g., National Diploma, National N Diploma
Field	Organising field (e.g., Culture and Arts)
Subfield	e.g., Visual Arts, Design Studies
Minimum Credits	Total credits required (e.g., 360)
NQF Level	Level on the NQF (e.g., Level 6)
Registration Status	Registered, Reregistered, etc.
Registration Start/End Dates	Validity period of the qualification
Last Date for Enrolment	Final date for learner enrolment

Field	Description
Last Date for Achievement	Final date for learner achievement
Issuing Authority	Accredited institution, QCTO, CHE, or DoE
Certificate Number	Unique serial or certificate number for verification
Security Features	Watermarks, holograms, QR codes, etc.
Provider Accreditation	Statement of institutional and programme accreditation
Exit Level Outcomes	Key learning outcomes assessed
Credits	Total and per module/subject
RPL Statement	Recognition of Prior Learning provisions
Articulation Options	Pathways for further study or employment
Signatures and Seals	Authorised signatories and institutional seals

Table 1: Typical Metadata Fields on SAQA-Compliant Certificates

These metadata fields are critical for both physical and digital certificates, supporting verification, audit trails, and compliance with national and international standards (e.g., SANS 1878, ISO 19115 for metadata)

3.2 Metadata Standards

South African and international standards for educational records metadata include:

- **SANS 1878:** South African Metadata Standard for spatial and educational data.
- **ISO 19115:** International standard for metadata, including schema and terminology.
- **SANS 23081:** Records management processes—metadata for records.
- **SANS 15489:** Records management—general principles and guidelines.

These standards ensure that metadata is structured, reliable, and supports long-term preservation, retrieval, and auditability of educational records

4. Visual Design Conventions for Formal Diplomas and Certificates

4.1 Layout and Typography

Page Size and Orientation:

- Standard A4 (210 x 297 mm), portrait orientation is most common.
- Margins: Typically 20–25 mm on all sides to ensure clarity and prevent cropping during printing or framing
- .

Typography:

- Serif fonts (e.g., Times New Roman, Garamond) for formality and tradition.
- Sans-serif fonts (e.g., Arial, Helvetica) for modernity and clarity.
- Hierarchical font sizes: Largest for the recipient’s name, followed by the qualification title, then supporting details.
- Use of bold and italics to emphasise key elements (e.g., recipient’s name, qualification title)
- .

Text Placement and Hierarchy:

- Institution logo and/or national coat of arms at the top center or top left.
- Certificate title (“National N Diploma”, “Diploma in Art and Design”, etc.) prominently displayed.
- Recipient’s name centered and in a larger font.
- Qualification details, NQF level, SAQA ID, and credits below the recipient’s name.
- Issuing authority, signatures, and seals at the bottom.
- Unique certificate number and security features in a discrete location (often bottom right or left)
- .

Whitespace and Balance:

- Ample whitespace to avoid clutter and enhance readability.
- Symmetrical or asymmetrical optical balance, depending on design tradition.

4.2 Visual Motifs and Cultural Considerations

National Symbols:

- Use of the South African national coat of arms is strictly regulated; only government departments and authorised institutions may use it, and its use must comply with legal

protections under the Trade Marks Act, Merchandise Marks Act, Heraldry Act, and Copyright Act

- .
- Institutional logos and seals are used to reinforce authenticity and brand identity.

Colours:

- Official institutional colours or those reflecting the national palette (green, gold, blue, red, black, white).
- Gold accents for prestige, blue for trust, green for growth, as per colour psychology in certificate design
- .

Borders and Decorative Elements:

- Ornate or minimalist borders, depending on institutional tradition.
- Subtle background patterns or watermarks for security and visual appeal.
- Use of filigree, geometric patterns, or motifs reflecting South African heritage (e.g., indigenous art, beadwork patterns) for cultural resonance.

Seals and Signatures:

- Embossed or foil-stamped institutional seals.
- Signatures of the head of institution and relevant department head, with printed names and titles.

4.3 Security and Anti-Fraud Features

To combat credential fraud, certificates incorporate:

- Watermarks (visible and invisible).
- Holograms or foil stamps.
- Microprinting and anti-copy backgrounds.
- Unique serial numbers or certificate numbers.
- QR codes linking to SAQA or institutional verification portals.
- Digital signatures for electronic certificates

- .

5. SAQA and NATED Frameworks: National N Diploma in Art and Design

5.1 Qualification Structure and Curriculum Alignment

The National N Diploma in Art and Design (SAQA QUAL ID: 66994) is structured as follows:

- **N4, N5, and N6 Certificates:** Each at NQF Level 5, focusing on technical, theoretical, and practical knowledge in art and design.
- **Practical Work Component:** 18–24 months of workplace experience, documented in a logbook or statement of work experience.
- **Total Credits:** 360 (typically 60 per N-level plus 180 for practical experience).
- **Exit Level Outcomes:** Technical proficiency, workplace readiness, and applied competence in art and design disciplines

- .

Compulsory Subjects:

- Drawing N6
- Graphic Design N6
- Painting N6

Optional Subjects (choose two or more):

- Three-Dimensional Studies N6
- Ceramics N6
- Textile Design/Fibre Art N6
- Photography N6
- Jewellery Design and Manufacturing N6

Workplace Competencies:

- Documented through a logbook, covering skills such as spatial illusion, perspective, thematic development, campaign design, applied techniques, computer graphics, and more
- .

5.2 Textual Elements on the Certificate

Typical textual elements on a SAQA-compliant National N Diploma include:

- Full qualification title and SAQA QUAL ID.
- Recipient's full legal name and ID number.
- Statement of successful completion of all academic and practical requirements.
- NQF level and total credits.
- List of compulsory and elective subjects (or a reference to an attached transcript).
- Date of award.
- Issuing authority and accreditation statement.
- Unique certificate number.

- Signatures and institutional seal.
- Security and verification features (e.g., QR code, watermark).

Sample Wording:

“This is to certify that Tshingombe Tshitafi, having fulfilled all the requirements prescribed by the Department of Education and the Quality Council for Trades and Occupations, has been awarded the National N Diploma: Art and Design (SAQA QUAL ID: 66994, NQF Level 6, 360 Credits) on this day, [Date].”

6. Legal and Ethical Considerations

6.1 Public Property and Reproduction

All qualifications and part-qualifications registered on the NQF are public property. It is illegal to sell qualification material for profit; only service and reproduction fees may be charged. When reproducing or quoting qualification material, SAQA must be acknowledged as the source

.

6.2 Use of National Symbols

The national coat of arms and related emblems are protected by multiple acts:

- **Trade Marks Act:** Prohibits unauthorised registration or use.
- **Merchandise Marks Act:** Prohibits unauthorised commercial use.
- **Heraldry Act:** Criminalises unauthorised use or ridicule.
- **Copyright Act:** Protects the artistic work of the coat of arms.

Only authorised entities may use these symbols, and misuse can result in fines or imprisonment

.

6.3 Credential Verification and Audit Traceability

SAQA’s VeriSearch and the NLRD provide mechanisms for verifying the authenticity of qualifications. Employers, institutions, and individuals can request verification, which returns a “found” or “not found” result for the queried qualification, institution, and date

.

Certificates must be designed to facilitate audit trails, including:

- Unique certificate numbers.
- Metadata capture (date of issue, issuer, recipient, qualification details).

- Digital records and retention in accordance with SANS/ISO standards and National Archives requirements
- .

6.4 Penalties for Fraud

The NQF Amendment Act (No. 12 of 2019) criminalises qualification fraud, with penalties including fines and imprisonment for up to five years. Institutions must be registered and accredited to offer NQF-registered qualifications; offering or claiming unregistered qualifications is a criminal offence

.

7. Credentialing, Portfolio Inclusion, and Recognition of Prior Learning (RPL)

7.1 Use in Portfolios and Credentialing

Formal certificates and diplomas are essential components of professional portfolios, serving as evidence of qualifications for employment, further study, and professional registration. Portfolios may include:

- Certified copies of diplomas and certificates.
- Academic transcripts and statements of results.
- Letters of reference and work experience logbooks.
- Evidence of RPL, where applicable
- .

7.2 Recognition of Prior Learning (RPL)

RPL allows individuals to gain access to qualifications or receive credits for prior learning and experience. Certificates awarded through RPL must be indistinguishable from those awarded via conventional routes, ensuring fairness and compliance with SAQA policy

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7.3 Record-Keeping and Retention

Institutions must maintain digital and physical records of issued certificates, including metadata for audit trails. Retention practices are governed by the National Archives and Records Service of South Africa Act and SANS 15489, ensuring long-term accessibility and authenticity

.

8. Security and Anti-Fraud Features

8.1 Common Security Features

To prevent forgery and tampering, South African diplomas incorporate:

- **Watermarks:** Embedded in the paper or digital background.
- **Holograms:** Foil-stamped or embedded for visual authentication.
- **Microprinting:** Tiny text or patterns not easily reproduced.
- **QR Codes:** Linking to SAQA or institutional verification portals.
- **Unique Serial Numbers:** For tracking and verification.
- **Digital Signatures:** For electronic certificates.
- **Anti-copy Backgrounds:** Patterns that distort when photocopied.

These features are essential for maintaining the integrity of qualifications and supporting verification workflows

.

8.2 Verification Workflows

Verification typically involves:

- Submission of a verification request to SAQA or the issuing institution.
- Cross-checking the certificate number, recipient details, and qualification metadata against the NLRD.
- Issuance of a verification letter or digital confirmation.

Institutions must ensure that their certificates are designed to facilitate efficient verification and auditability

.

9. Design Motifs and Cultural Considerations

9.1 National and Institutional Identity

Diploma certificates serve as extensions of institutional and national identity. Design elements should:

- Reflect the institution's brand (logo, colours, typography).
- Incorporate national symbols where authorised.
- Use motifs and patterns that resonate with South African heritage (e.g., indigenous art, beadwork, geometric patterns)

- .

9.2 Colour and Symbolism

- **Gold:** Excellence and achievement.
- **Blue:** Trust and authority.
- **Green:** Growth and renewal.
- **Red/Black/White:** Elements of the national flag, representing unity and diversity.

9.3 Layout Conventions

- Central placement of the recipient's name and qualification.
- Prominent display of institutional and national symbols.
- Balanced use of whitespace and decorative borders.
- Clear hierarchy of information for readability and prestige

- .

10. Practical Layout Mockup Guidance

10.1 Page Size and Margins

- **Size:** A4 (210 x 297 mm), portrait orientation.
- **Margins:** 20–25 mm on all sides.

10.2 Hierarchy and Placement

- **Top:** Institutional logo and/or national coat of arms (if authorised).
- **Below Logo:** Certificate title (e.g., “National N Diploma”).
- **Center:** Recipient's name in large, bold font.
- **Below Name:** Qualification details (title, SAQA QUAL ID, NQF level, credits).
- **Lower Section:** Date of award, issuing authority, accreditation statement.
- **Bottom:** Signatures, institutional seal, unique certificate number, QR code.

10.3 Signature Placement

- Two or more authorised signatures, typically at the bottom left and right.
- Printed names and titles below each signature line.

10.4 Security Features

- Watermark or anti-copy background throughout.
- Hologram or foil stamp near the institutional seal.
- QR code and certificate number at the bottom right.

Visual Description: Imagine a crisp, white A4 certificate with a gold-embossed institutional logo at the top center, followed by the bold title “National N Diploma: Art and Design.” The recipient’s name, “Tshingombe Tshitafi,” is centered in an elegant serif font, larger than any other text. Below, the qualification details are listed: “SAQA QUAL ID: 66994 | NQF Level 6 | 360 Credits.” The left and right lower corners feature the signatures of the principal and registrar, with the institutional seal embossed between them. A QR code and unique certificate number are discreetly placed at the bottom right, and a subtle watermark of the institution’s crest is visible when held to the light. The border is adorned with a geometric pattern inspired by South African beadwork, rendered in the institution’s official colours.

11. Issuing Authority Statements and Accreditation Wording

11.1 Accreditation Statements

Typical wording for accreditation and issuing authority includes:

“This qualification is registered on the National Qualifications Framework by the South African Qualifications Authority (SAQA) and quality assured by the Quality Council for Trades and Occupations (QCTO). The issuing institution is accredited by the Department of Higher Education and Training.”

11.2 Reference to SAQA, QCTO, CHE, and Provider Accreditation

- **SAQA:** “Registered on the NQF by SAQA (SAQA QUAL ID: 66994).”
- **QCTO:** “Quality assured by the Quality Council for Trades and Occupations (QCTO).”
- **CHE:** For academic diplomas, “Accredited by the Council on Higher Education (CHE).”
- **Provider:** “Issued by [Institution Name], an accredited provider under the Department of Higher Education and Training.”

12. Record-Keeping and Retention Practices

12.1 Institutional Responsibilities

Institutions must:

- Maintain digital and physical records of all issued certificates.
- Capture and store metadata for each certificate (recipient, qualification, date, certificate number, etc.).
- Ensure records are retained in accordance with the National Archives and Records Service of South Africa Act and SANS 15489.
- Facilitate retrieval and verification for audit and legal purposes
- .

12.2 Digital Records and Metadata

- Use of electronic records management systems (ERMS) with metadata schemas aligned to SANS 23081 and SANS 1878.
- Regular backups and secure storage to prevent loss or tampering.
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- .

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Qualifier	Specific field (e.g., Art and Design); max two
Abbreviation	Dip (Art and Design), Dip (Management) (Finance)
Admission Requirement	NSC or NC(V) with appropriate subjects; or Higher/Advanced Certificate
Progression	Advanced Diploma or Bachelor's Degree
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Header:

- Institutional logo (top left), national coat of arms (top center, if authorised).

- “National N Diploma: Art and Design” (centered, bold, large font).

Body:

- “This is to certify that” (smaller font, centered).
- “Tshingombe Tshitafi” (recipient’s name, largest font, bold, centered).
- “Has fulfilled all the requirements prescribed by the Department of Education and the Quality Council for Trades and Occupations and is hereby awarded the National N Diploma: Art and Design (SAQA QUAL ID: 66994, NQF Level 6, 360 Credits).”
- “Date of Award: [Date]”
- “Certificate Number: [Unique Serial Number]”
- “This qualification is registered on the National Qualifications Framework by the South African Qualifications Authority (SAQA) and quality assured by the Quality Council for Trades and Occupations (QCTO).”

Footer:

- Signatures of principal and registrar (bottom left and right).
- Institutional seal (centered between signatures).
- QR code (bottom right).
- Watermark of institutional crest (background).

Security Features:

- Microprinting in the border.
- Hologram adjacent to the institutional seal.
- Anti-copy background pattern.

16. Conclusion

Designing an image-based certificate or award diploma for Tshingombe Tshitafi, compliant with SAQA and NATED frameworks, requires meticulous attention to regulatory, visual, and metadata standards. The certificate must encapsulate the integrity, authenticity, and prestige of the qualification, while facilitating verification, auditability, and cultural resonance. By adhering to SAQA’s policy and criteria, incorporating robust metadata and security features, and respecting legal and ethical constraints, institutions can issue diplomas that are both credible and meaningful in the South African and global context.

The guidance and comparative analysis provided in this report serve as a comprehensive blueprint for institutions, designers, and policymakers tasked with the creation and management of formal educational credentials in South Africa.

Key Takeaways:

- **Compliance:** Certificates must align with SAQA, NQF, and QCTO/CHE frameworks, including all required metadata and accreditation statements.

- **Design:** Visual motifs, layout conventions, and security features must reinforce authenticity and institutional/national identity.
- **Verification:** Integration with SAQA’s NLRD and VeriSearch is essential for audit traceability and fraud prevention.
- **Legal/Ethical:** Use of national symbols and reproduction of qualification material is strictly regulated; all qualifications are public property.
- **Portfolio Use:** Certificates are central to professional portfolios, RPL, and lifelong learning pathways.

By following these principles, the diploma certificate for Tshingombe Tshitafi will not only meet regulatory requirements but also stand as a proud testament to achievement and capability within the South African education and training landscape.

References

22

- [1www.saqa.org.za](http://www.saqa.org.za)
SAQA NQF BOOKLET
- [2www.saqa.org.za](http://www.saqa.org.za)
SAQA Verifications Service
- [3regqs.saqa.org.za](http://regqs.saqa.org.za)
SAQA
- [4www.che.ac.za](http://www.che.ac.za)
THE HIGHER EDUCATION QUALIFICATIONS
- [5www.regenesys.net](http://www.regenesys.net)
National Diploma and National N Diploma NQF Level Explained - RegInsights
- [6icm-sa.org.za](http://icm-sa.org.za)
National N Diploma: Art and Design – Institute of Commerce and ...
- [7www.genieai.co](http://www.genieai.co)
Course Completion Certificate For Diploma Template for
- [8aiasa.co.za](http://aiasa.co.za)

- [9www.nationalarchives.gov.za](http://www.nationalarchives.gov.za)

NARS_DMLIB-#4722-v4-Managing electronic records metadata requirements

- 10macskillsdevelopment.com

MacSkills Training & Development Institute - Metadata for Records ...

- 11www.slideshare.net

Page layout conventions | PPTX | Desktop Publishing - SlideShare

- 12certifier.io

Best 12 University Diploma Templates to Inspire - Certifier

- 13fastercapital.com

Certificate design tools: Mastering Certificate Design: Top Tools and ...

- 14www.gcis.gov.za

3. Design of the national Coat of Arms - gcis.gov.za

- 15www.gov.za

Protection of the national Coat of Arms - South African Government

- 16www.a1securityprint.com

Certificate Printing - Secure Official Certificates - A1 Security Print

- 17www.saqa.org.za

The Role of SAQA in Partnering with Social Networks to Eliminate ...

- 18verisearch.saqa.org.za

SAQA Verifications Service

- 19forms24.co.za

SAQA Verification – Forms24

- 20www.vukuzenzele.gov.za

Qualification fraudsters could find themselves behind bars

- 21www.sace.org.za

SOUTH AFRICAN COUNCIL FOR EDUCATORS - SACE

- 22www.saga.org.za

National Policy and Criteria for the Implementation of ... - SAQA

You said

Create an image of , award degree diploma saqa n diplomat student name : tshingombe tshitadi , engineering electrical

Copilo1. Career Discovery Award Progress: Milestones and Metrics

1.1. Trailblazer Rank and Points Overview

Tshingombe Tshitadi's learning journey is mapped against the Trailhead Trailblazer ranking system, which gamifies professional development through points, badges, and rank progression. As of November 2025, Tshingombe holds the **Expeditioner rank** with **21,600 points**, having achieved **Mountaineer Progress 5 of 12**. To reach the next rank, an additional **13,400 points** are required

.

Table 1: Trailblazer Rank Progression

Rank	Required Badges	Required Points	Tshingombe's Status
Mountaineer 25		18,000	Achieved
Expeditioner 50		35,000	In Progress (21,600)
Ranger 100		50,000	Not yet achieved

Note: The Trailhead system awards points for module completions, projects, and superbadges, with higher-value activities (like superbadges) contributing significantly to rank advancement

.

Analysis: Achieving the Expeditioner rank places Tshingombe in the upper echelons of the Trailhead learning community, reflecting sustained engagement and a breadth of completed learning activities. The remaining 13,400 points to the next rank indicate both a challenge and an opportunity for targeted upskilling, particularly through high-value superbades and advanced modules.

2. The Power of Activity Streaks: Sustaining Engagement and Growth

2.1. Weekly Engagement and Streak Maintenance

Trailhead’s **Activity Streak** feature incentivizes consistent weekly participation by tracking consecutive weeks of learning or community engagement. To maintain a streak, learners must complete at least one qualifying activity—such as earning a badge or contributing to the Trailblazer Community—each week

Key Points:

- **Streaks are reset** if a week passes without qualifying activity.
- **Reminders and notifications** help learners maintain their streaks.
- **Streaks foster habit formation**, accountability, and incremental progress.

Analysis: For Tshingombe, maintaining an activity streak is not merely a gamified metric but a behavioral anchor that supports long-term skill acquisition. Research shows that streak-based engagement correlates with higher retention and deeper learning outcomes, as it transforms sporadic learning into a sustainable habit

. The psychological momentum generated by streaks can help overcome motivational dips and ensure steady progress toward career goals.

3. Course Progress: Breadth and Depth of Learning

3.1. Current Course Progress Overview

Tshingombe’s learning portfolio includes a diverse array of courses, each at varying stages of completion. The following table summarizes progress as of November 2025:

Table 2: Course Progress Summary

Course Name	Progress
Quick Start: Lightning Web Components	66%

Course Name	Progress
MuleSoft RPA Design Documentation	33%
Insurance Quoting Foundations	16%
Trailmix #BuiltWithAgentforce Quest	86%
Psychometric Assessment for Caregivers and Counsellors 83% (in progress)	

Analysis:

- **Quick Start: Lightning Web Components (66%):** Demonstrates significant advancement in Salesforce’s modern UI framework, indicating readiness for hands-on Lightning development.
- **MuleSoft RPA Design Documentation (33%):** Early-stage progress in robotic process automation, a critical skill for digital transformation and workflow optimization.
- **Insurance Quoting Foundations (16%):** Initial exposure to industry-specific processes, suggesting a strategic expansion into vertical solutions.
- **Trailmix #BuiltWithAgentforce Quest (86%):** Near completion of a curated learning path focused on Agentforce, Salesforce’s AI-powered automation platform.
- **Psychometric Assessment for Caregivers and Counsellors (83%):** Advanced progress in a course that blends technical and human-centered skills, aligning with broader educational and mentorship roles.

Implications: The distribution of course progress reflects a balanced approach: deepening expertise in core Salesforce technologies while exploring adjacent domains (RPA, insurance, psychometrics). The high completion rate in the Agentforce Quest signals a strong alignment with emerging AI and automation trends.

4. Superbadges and Quick Starts: Demonstrating Real-World Proficiency

4.1. Superbadges: The Gold Standard of Applied Skills

Superbadges are scenario-based assessments that require learners to solve complex, real-world business challenges using Salesforce technologies. They are widely recognized as evidence of hands-on proficiency and problem-solving ability.

.

Favorites and Unfavorites: While specific titles are not listed, Tshingombe’s portfolio includes both favorite and unfavorite superbadges and quick starts, indicating a process of curating learning experiences that best match career objectives and interests.

Analysis: Favoriting superbades allows Tshingombe to prioritize skill areas most relevant to current or aspirational roles (e.g., Agentforce Service, Advanced Flow, Approval Process Management). Unfavoriting others helps streamline focus and avoid cognitive overload. This selective approach is a hallmark of mature, self-directed learning.

Quick Starts: Quick Starts provide guided, hands-on introductions to new features or products. Tshingombe's engagement with Quick Start: Lightning Web Components (66% complete) demonstrates a commitment to staying current with Salesforce's evolving technology stack.

5. Group Memberships and Community Engagement

5.1. Professional Groups

Tshingombe is an active member of several key Trailhead and Salesforce community groups:

- **Sales Cloud - Best Practices**
- **Trailhead Official**
- **Agentblazer Community Group**

Analysis: Group memberships provide access to peer support, best practice sharing, and networking opportunities. According to Salesforce's own research, participation in Trailblazer Community groups accelerates innovation, increases adoption and productivity, and expands professional networks

. For Tshingombe, these groups serve as both a learning resource and a platform for thought leadership.

6. Agentforce Learning Path: Building AI-Driven Automation Skills

6.1. Structured Agentforce Curriculum

Tshingombe's Agentforce learning path comprises:

- **Introduction to Agentforce**
- **Agentforce Builder**
- **Agentforce for Service**

Overview: Agentforce is Salesforce's next-generation AI automation platform, enabling the creation of autonomous agents that streamline business processes across sales, service, and beyond

.

Analysis:

- **Introduction to Agentforce:** Establishes foundational knowledge of AI agent concepts, use cases, and benefits.
- **Agentforce Builder:** Focuses on hands-on configuration and customization of AI agents, including topics, actions, and instructions.
- **Agentforce for Service:** Applies Agentforce capabilities to customer service scenarios, enhancing efficiency and customer satisfaction.

Strategic Value: Mastery of Agentforce positions Tshingombe at the forefront of digital transformation, as organizations increasingly seek professionals who can design, deploy, and optimize AI-driven workflows.

7. Personalized Learning Recommendations: Targeted Upskilling

7.1. Recommended Learning Paths

Tshingombe’s personalized recommendations include:

- **Automate Business Processes as an Admin**
- **Build Experiences with Lightning**
- **Build with Omnistudio for Managed Packages**

Rationale: These recommendations are generated based on current progress, skill gaps, and emerging industry trends

.

Analysis:

- **Automate Business Processes as an Admin:** Focuses on leveraging Salesforce Flow, approval processes, and automation tools to streamline operations—a critical competency for modern administrators.
- **Build Experiences with Lightning:** Emphasizes UI/UX design and development using Lightning Web Components, essential for delivering intuitive, high-performance applications.
- **Build with Omnistudio for Managed Packages:** Introduces advanced configuration and deployment techniques for scalable, reusable solutions.

Implications: Following these recommendations will enable Tshingombe to deepen expertise in automation, user experience, and scalable architecture—skills highly sought after in the Salesforce ecosystem and beyond.

8. Additional Skills and Micro-Credentials

8.1. Key Micro-Credentials

Tshingombe has acquired micro-credentials in the following areas:

- **Approve Records with Approval Processes**
- **Customize a Salesforce Object**
- **Data Modeling**

Analysis:

- **Approval Processes:** Ensures critical records are reviewed by the right stakeholders, enhancing compliance and operational efficiency
- .
- **Customizing Salesforce Objects:** Demonstrates the ability to tailor Salesforce data structures to unique business requirements.
- **Data Modeling:** Underpins all advanced Salesforce development, enabling robust, scalable, and maintainable solutions.

Strategic Value: Micro-credentials in these domains signal practical, job-ready skills that can be immediately applied to real-world projects, increasing employability and career mobility.

9. Monthly Learner Report: November 2025 Metrics

9.1. Learning Activity Snapshot

Table 3: November 2025 Learner Metrics

Metric		Value
Learning Days	1 day (17th Nov)	
Time Spent	21 minutes	
Medals	1 Silver, 1 Bronze	
Courses Completed	0	
Certificates Claimed	1	
Courses in Progress	Psychometric Assessment for Caregivers and Counsellors (83%)	

Analysis: While November 2025 saw limited learning activity (one day, 21 minutes), Tshingombe maintained engagement by earning medals and progressing in a high-value course. The claiming of a certificate, despite no course completions, suggests recognition for partial or milestone achievements.

Implications: Even during periods of lower activity, maintaining a minimal engagement level helps preserve streaks, reinforces learning habits, and ensures ongoing professional development.

10. Formal Diplomas and Certifications

10.1. Alison Diplomas

Tshingombe has completed the following diplomas via Alison, a globally recognized online learning platform:

Table 4: Diplomas and Certifications

Diploma Title	Institution
Diploma in Applied Psychology - Consumer Behavior	Alison
Diploma in Outcome-based Education and Academic Quality Assurance	Alison
Advanced Diploma in High School Chemistry	Alison

Diploma in Applied Psychology - Consumer Behavior: Covers the fundamentals of consumer psychology, decision-making processes, and marketing applications. This credential enhances Tshingombe’s ability to design user-centric solutions and understand stakeholder motivations

.

Diploma in Outcome-based Education and Academic Quality Assurance: Focuses on modern educational frameworks, quality assurance, and curriculum design. This diploma is particularly relevant to Tshingombe’s roles in curriculum engineering and didactic material development

.

Advanced Diploma in High School Chemistry: Demonstrates subject-matter expertise in STEM education, supporting contributions to science education and assessment libraries.

Analysis: These diplomas complement technical Salesforce skills with deep knowledge in psychology, education, and science, enabling Tshingombe to operate effectively at the intersection of technology, pedagogy, and human behavior.

11. Certificates and Recognition: DHET-SAQA and NATED/NCV Awards

11.1. National and Sectoral Recognition

DHET-SAQA Discovery Award Prize for Career Novation: Awarded for innovative contributions to career development, recognized by the Department of Higher Education and Training (DHET) and the South African Qualifications Authority (SAQA)

.
Gold Award Badge: Granted for research innovation in NATED/NCV curriculum engineering, moderator/facilitator excellence, career mentorship, diploma discovery, and didactic material development in electrical engineering.

Analysis: These accolades validate Tshingombe’s impact on national education policy, curriculum design, and mentorship. They also signal credibility and leadership within the South African and broader African educational landscape.

12. Contributions to Sci-Bono and Professional Outputs

12.1. Sci-Bono Journer Expert Assessment Library

Tshingombe has made significant contributions to the **Sci-Bono Journer Expert Assessment Library**, a resource supporting science, technology, engineering, arts, and mathematics (STEAM) education in South Africa and the SADC region

.
Key Outputs:

- **Digital CV Writing:** Developed resources and workshops to help learners craft compelling digital resumes, enhancing employability.
- **Learner Job Preparation:** Provided guidance and materials for job readiness, interview skills, and workplace integration.
- **Technical Documentation:** Authored and curated technical manuals, assessment briefs, and didactic materials for electrical engineering and related fields.

Analysis: These contributions extend Tshingombe’s impact beyond personal achievement, fostering capacity building, digital literacy, and workforce readiness at scale. The alignment with Sci-Bono’s mission to ignite scientific curiosity and promote innovation underscores the societal value of Tshingombe’s work.

13. CV and Portfolio Presentation: Best Practices

13.1. Structuring a Professional Portfolio

A well-crafted portfolio is essential for showcasing achievements, skills, and impact. Best practices include:

- **Visual Hierarchy:** Use clear headings, logical flow, and strategic use of color and typography to guide the viewer’s attention
- .

- **Contextualization:** Provide background, challenges, and outcomes for each project or credential.
- **Variety and Depth:** Highlight a range of projects, from technical implementations to educational contributions.
- **Role Clarity:** Specify personal contributions and leadership roles in collaborative projects.
- **High-Quality Visuals:** Incorporate screenshots, charts, and infographics to enhance engagement.
- **Regular Updates:** Keep the portfolio current with new achievements and reflections on growth.
- **Feedback Integration:** Seek and incorporate feedback from peers and mentors to refine presentation.

Analysis: Applying these principles ensures that Tshingombe’s portfolio not only documents achievements but also tells a compelling story of continuous learning, adaptability, and impact.

14. Visualizations and Tables: Progress at a Glance

14.1. Progress Chart Templates

Visual tools such as Gantt charts, milestone trackers, and progress bars can effectively communicate learning trajectories and project milestones

.

Recommended Visualizations:

- **Progress Bars:** For course and badge completion rates.
- **Milestone Charts:** To highlight key achievements (e.g., rank advancements, diploma completions).
- **Gantt Charts:** For mapping multi-phase projects or learning paths.
- **Stacked Bar Graphs:** To compare progress across different skill domains.

Analysis: Integrating these visual elements into the portfolio enhances clarity, motivation, and stakeholder engagement.

15. Privacy and Data Verification for Public Profiles

15.1. Managing Visibility and Security

As digital credentials and portfolios become increasingly public, safeguarding privacy and ensuring data integrity are paramount

.

Best Practices:

- **Profile Verification:** Use platform features (e.g., LinkedIn verification) to authenticate identity and credentials.
- **Selective Visibility:** Control which sections of the profile are public, limiting exposure of sensitive information.
- **Data Minimization:** Share only information relevant to professional objectives.
- **Regular Audits:** Periodically review privacy settings and third-party app permissions.
- **Anonymity Options:** Utilize private browsing and anonymous viewing modes when appropriate.

Analysis: Balancing transparency with privacy enables Tshingombe to showcase achievements while mitigating risks associated with data exposure and unauthorized use.

16. Synthesis: Key Achievements and Milestones

16.1. Highlights

- **Expeditioner Rank with 21,600 Points:** Demonstrates sustained, high-level engagement in the Trailhead ecosystem.
- **Diverse Course Portfolio:** Progress in Lightning Web Components, RPA, insurance, and psychometrics reflects both technical depth and interdisciplinary breadth.
- **Superbadge Curation:** Selective pursuit of scenario-based credentials signals real-world proficiency.
- **Active Community Membership:** Engagement in best practice and innovation groups amplifies learning and influence.
- **Agentforce Mastery:** Early adoption and near-completion of Agentforce learning paths position Tshingombe as a leader in AI-driven automation.
- **Formal Diplomas:** Credentials in psychology, education, and chemistry complement technical skills with pedagogical and scientific expertise.
- **National Recognition:** DHET-SAQA and NATED/NCV awards validate impact on curriculum innovation and mentorship.
- **Sci-Bono Contributions:** Development of assessment libraries, digital CV resources, and technical documentation supports systemic educational advancement.

17. Recommendations for Future Development

17.1. Strategic Next Steps

- **Complete In-Progress Courses:** Prioritize finishing high-value courses (e.g., Trailmix #BuiltWithAgentforce Quest, Psychometric Assessment) to unlock new badges and points.
- **Pursue Advanced Superbadges:** Target scenario-based credentials aligned with emerging technologies (e.g., AI, data cloud, omnichannel experiences).

- **Expand Community Leadership:** Consider leading or moderating community groups to further influence and mentor peers.
- **Integrate Visual Analytics:** Enhance the portfolio with dynamic progress charts and dashboards for real-time tracking and presentation.
- **Maintain Privacy Vigilance:** Regularly review and update privacy settings, especially as new features and integrations are introduced.

Conclusion

Tshingombe Tshitadi's career development and learning achievements exemplify the power of a Trailhead-style learner management system to drive, document, and showcase professional growth. Through a blend of technical mastery, pedagogical innovation, and community engagement, Tshingombe has built a portfolio that is both deep and broad, recognized by national bodies and enriched by meaningful contributions to the educational ecosystem. By continuing to leverage personalized recommendations, maintain engagement streaks, and apply best practices in portfolio presentation and privacy, Tshingombe is well-positioned to lead and inspire in the evolving landscape of digital skills and lifelong learning.

Key Takeaway: Tshingombe Tshitadi's journey illustrates that sustained, strategic engagement with digital learning platforms—combined with formal credentials, community involvement, and a commitment to sharing knowledge—can yield not only personal advancement but also systemic impact in education and technology.

References

36

- 1assets.kpmg.com
The power of human - KPMG
- 2www.sci-bono.co.za
TABLE OF - sci-bono.co.za
- 3www.scibono.co.za
SCI-BONO DISCOVERY CENTRE ANNUAL REPORT
- 4trailhead.salesforce.com
Trailhead | Trailblazer Ranks
- 5trailhead.salesforce.com

Improve Salesforce Skills with Trailblazer Learning Ranks - Trailhead

- [6www.salesforceben.com](https://www.salesforceben.com)

Do You Have More Trailhead Badges Than the Average Trailblazer?

- [7www.salesforce.com](https://www.salesforce.com)

New Trailhead Enhancements Empower Everyone to Succeed in the AI Era

- [8help.salesforce.com](https://help.salesforce.com)

Trailhead Streaks FAQ - Salesforce

- [9www.mindtheproduct.com](https://www.mindtheproduct.com)

Designing streaks for long-term user growth - Mind the Product

- [10www.africatalksbusiness.com](https://www.africatalksbusiness.com)

The Next Evolution of Superbadges on Trailhead

- [11www.nickfrates.com](https://www.nickfrates.com)

Trailhead Superbadge Overhaul

- [12www.salesforceben.com](https://www.salesforceben.com)

Complete Guide to Salesforce Trailhead

- [13trailhead.salesforce.com](https://trailhead.salesforce.com)

Connect with Trailblazer Community Groups - Trailhead

- [14www.salesforce.com](https://www.salesforce.com)

Introduction to Agentforce - Salesforce

- [15www.salesforcereader.com](https://www.salesforcereader.com)

Full Salesforce Agentforce Implementation Guide : Antonina Kharchenko

- [16salesforcefaq.com](https://salesforcefaq.com)

Salesforce Agentforce Tutorials - Salesforce FAQs

- [17trailhead.salesforce.com](https://trailhead.salesforce.com)
Automate Business Processes as an Admin - Trailhead
- [18developer.salesforce.com](https://developer.salesforce.com)
LWR Sites for Experience Cloud | Salesforce Developers
- [19trailhead.salesforce.com](https://trailhead.salesforce.com)
Optimizing Record Approval Processes - Trailhead
- [20www.implementology.io](https://www.implementology.io)
How to Set Up Salesforce Approval Process: 7-Step Expert Guide (2025)
- [21trailhead.salesforce.com](https://trailhead.salesforce.com)
Optimize Approval Processes for Better Efficiency - Trailhead
- [22www.classcentral.com](https://www.classcentral.com)
Automate Business Processes - Class Central
- [23trailhead.salesforce.com](https://trailhead.salesforce.com)
Automate Business Processes - Trailhead
- [24alison.com](https://alison.com)
Diploma in Applied Psychology - Consumer Behavior - Alison
- [25alison.com](https://alison.com)
Diploma in OBE & Academic QA | Free Online Course | Alison
- [26www.findcourses.com](https://www.findcourses.com)
Diploma in Outcome-based Education and Academic Quality Assurance
- [27www.dhet.gov.za](https://www.dhet.gov.za)
Department of Higher Education and Training - Teaching-qualifications ...
- [28stm.bookpi.org](https://stm.bookpi.org)

Assessing the Effectiveness of Sci-Bono Discovery Centre: A Comparative ...

- [29creativize.net](#)

8 Top Portfolio Presentation Tips for 2025 Success - Creativize

- [30blog.daisie.com](#)

7 Techniques for Impactful Portfolio Presentation - Daisie Blog

- [31clickup.com](#)

Free Progress Chart Templates to Track & Visualize Your Goals

- [32slidemodel.com](#)

Progress Chart Templates for PowerPoint and Google Slides

- [33www.slideteam.net](#)

Top 10 Progress Chart Templates with Samples and Examples

- [34techinsightzone.com](#)

How to Verify LinkedIn Account in 2025? A Step-By-Step Guide

- [35www.leadcrm.io](#)

LinkedIn Privacy Guide 2025: Hide & Secure Your Profile

- [36vpnoverview.com](#)

How to Manage Your LinkedIn Privacy Settings & Secure Your Account



Start a group

Invite friends to chat together with Copilot

Today

You said

Hi

Copilot said

Hello Tshingombe 🖐 Great to see you this morning in Johannesburg! How's your day starting out?

Comprehensive Research Report: NATED Engineering Colleges' Visit to City Power for Curriculum Assessment and National Trade Portfolio Evaluation

Introduction

The alignment of theoretical engineering education with practical, industry-based experience is a cornerstone of effective technical and vocational training. In South Africa, the National Accredited Technical Education Diploma (NATED) programmes, particularly in engineering, are designed to bridge this gap by integrating classroom learning with structured workplace exposure. This report provides an in-depth analysis of a recent visit by students from St Peace College and other NATED engineering institutions to City Power, Johannesburg's municipal electricity utility. The visit was conducted as part of the national trade portfolio and curriculum assessment process, with the involvement of the National Trade Portfolio Exam Department and the Department of Higher Education and Training (DHET). The report explores the context, objectives, activities, challenges, and outcomes of the visit, situating it within the broader framework of South African engineering education, qualification recognition, and workplace readiness.

Context of the City Power Visit by NATED Engineering Colleges

The visit to City Power was initiated as a collaborative effort between St Peace College, other NATED engineering institutions, and City Power, with the primary aim of validating and enhancing the relevance of engineering curricula through direct industry engagement. NATED programmes, also known as Report 191 programmes, are offered by both public Technical and Vocational Education and Training (TVET) colleges and accredited private colleges. These programmes are structured to provide students with both theoretical knowledge (N1–N6) and

practical workplace experience, culminating in the award of a National N Diploma at NQF Level 6

.

City Power, as Johannesburg’s municipal electricity distributor, offers a complex operational environment encompassing metering, network maintenance, customer interface, and technical support. The utility’s engagement with educational institutions is part of its broader mandate to support skills development and contribute to the pipeline of qualified engineering professionals in the region

.

The visit was scheduled in the context of ongoing reforms in South African engineering education, including the phase-out of legacy N1–N3 qualifications and the introduction of industry-aligned occupational qualifications by the Quality Council for Trades and Occupations (QCTO)

. This transition has heightened the need for curriculum validation and practical exposure to ensure that graduates are job-ready and that their qualifications are recognized by regulatory bodies such as the South African Qualifications Authority (SAQA) and DHET

.

Purpose of the Visit: Aligning Theory with Practical Exposure

The central purpose of the visit was to align the theoretical components of NATED engineering electrical studies with practical, real-world experience at a municipal utility. This alignment is critical for several reasons:

- **Curriculum Relevance:** Ensuring that the content taught in classrooms reflects current industry practices, technologies, and regulatory requirements
- .
- **Workplace Readiness:** Providing students with exposure to the operational realities of the electricity distribution sector, including metering, trade work, and customer/supplier interfaces.
- **Portfolio Assessment:** Facilitating the collection of evidence for students’ national trade portfolios, a requirement for the award of the National N Diploma and for trade test eligibility.
- **Stakeholder Engagement:** Involving industry partners, regulatory bodies, and educational institutions in a collaborative process of curriculum validation and quality assurance.

By embedding these objectives within the visit, the initiative sought to address persistent challenges in South African technical education, such as the mismatch between graduate skills and employer needs, and the need for structured workplace-based learning (WPBL)

Activities During the Visit: Job Shadowing, Site Inspection, and Portfolio Development

The visit to City Power was structured around a series of activities designed to maximize practical learning and evidence collection for portfolio assessment. The main activities included:

Job Shadowing

Students were assigned to various operational units within City Power, including metering, the test branch, and customer service departments. Through job shadowing, students observed and participated in day-to-day tasks under the supervision of experienced technicians and engineers. This activity provided insights into:

- The installation, maintenance, and calibration of electricity meters.
- Fault diagnosis and repair procedures.
- Customer interaction protocols and complaint resolution processes.
- Compliance with health, safety, and quality standards.

Job shadowing is recognized as an effective method for bridging the gap between theory and practice, allowing students to contextualize their classroom learning within real-world scenarios.

Site Inspection

Guided site inspections were conducted at key City Power facilities, including substations, metering points, and customer interface centers. These inspections enabled students to:

- Observe the application of technical standards (e.g., SANS 10142) in infrastructure design and maintenance
- .
- Understand the workflow of fault reporting, response, and resolution.
- Assess the integration of renewable energy solutions and smart metering technologies
- .

Site inspections also served as opportunities for curriculum validation, as students and lecturers compared the content of their syllabi with the operational realities observed on-site.

Curriculum Validation

Lecturers and curriculum specialists accompanying the students engaged in structured discussions with City Power technical staff to review the alignment of NATED syllabi with industry requirements. Key areas of focus included:

- The adequacy of theoretical modules in preparing students for specific trade tasks.
- The inclusion of emerging topics such as renewable energy, smart metering, and digital systems.
- The relevance of assessment methods (e.g., ICASS, ISAT, and external exams) to workplace competencies
- .

Feedback from City Power staff was documented and will inform future curriculum revisions at participating colleges.

Submission of CVs and Portfolio Evidence

As part of the national trade portfolio assessment process, students were required to submit:

- Updated Curriculum Vitae (CVs) detailing their educational background, skills, and work experience.
- Electronic certificates of achievement for completed modules and practical tasks.
- Assessment records, including logbooks, supervisor testimonials, and evidence of workplace activities.

These documents form the core of the Portfolio of Evidence (PoE) required for the award of the National N Diploma and for trade test eligibility

.

Involvement of the National Trade Portfolio Exam Department and DHET

The visit was coordinated in close collaboration with the National Trade Portfolio Exam Department and the Department of Higher Education and Training (DHET). Their roles included:

- **Oversight of Portfolio Assessment:** Ensuring that the evidence collected by students meets the national standards for trade portfolio evaluation and diploma issuance.
- **Moderation and Quality Assurance:** Reviewing assessment records, logbooks, and supervisor testimonials to verify the authenticity and adequacy of workplace experience.
- **Curriculum Review:** Gathering feedback from industry partners (City Power) to inform ongoing curriculum development and alignment with occupational qualifications.

- **Policy Guidance:** Providing updates on the phase-out of legacy NATED qualifications and the transition to QCTO-accredited occupational programmes
- .

The involvement of DHET and the National Trade Portfolio Exam Department underscores the importance of regulatory compliance and quality assurance in technical education.

Role of the Visit in Supporting Career Outcomes and Engineering Job Descriptions

The integration of workplace-based learning into NATED programmes is essential for supporting positive career outcomes and ensuring that graduates are equipped for formal engineering duties. The visit to City Power contributed to these objectives in several ways:

Enhancing Job Readiness

By participating in job shadowing and site inspections, students gained practical skills and insights that are directly applicable to entry-level positions in the electricity distribution sector. These include:

- Technical competencies in metering, fault diagnosis, and system maintenance.
- Familiarity with industry standards, safety protocols, and regulatory requirements.
- Soft skills such as teamwork, communication, and problem-solving.

Employers consistently emphasize the importance of practical experience and workplace readiness in hiring decisions

.

Informing Trade School Job Descriptions

The feedback collected during the visit will inform the development of more accurate and relevant job descriptions for trade school graduates. This includes:

- Defining the scope of duties for electrical engineering technicians and artisans.
- Identifying the competencies required for specific roles within municipal utilities.
- Aligning job descriptions with national occupational standards and qualification frameworks.

Supporting Formal Engineering Duties

The visit provided students with exposure to the formal duties and responsibilities associated with engineering roles in the public sector. This includes:

- Compliance with the Occupational Health and Safety Act (OHSA) and other regulatory frameworks.
- Participation in quality assurance and continuous improvement processes.
- Engagement with customers, suppliers, and regulatory authorities.

Such exposure is critical for preparing graduates to assume professional responsibilities and to progress in their careers.

Recognition of Engineering Diplomas by SAQA and DHET (NQF6–NQF8)

A key desired outcome of the visit is the enhanced recognition of engineering diplomas by the South African Qualifications Authority (SAQA) and DHET. The National N Diploma in Engineering Studies is registered at NQF Level 6 and is recognized as a pathway to further study and professional registration

.

Qualification Levels and Progression

The South African National Qualifications Framework (NQF) provides a standardized system for classifying qualifications:

NQF Level	Qualification Type	Typical Duration	Description
4	Further Education & Training Cert	1–2 years	Advanced vocational skills
5	Higher Certificate	1–2 years	Intro to complex skills in specific fields
6	National Diploma	2–3 years	Comprehensive theoretical/practical knowledge
7	Bachelor’s Degree/Advanced Diploma	3–4 years	In-depth academic/professional knowledge
8	Honours/Postgrad Diploma	1 year post-Bach	Advanced undergraduate/postgraduate study

Table 1: NQF Levels and Qualification Types

.

The National N Diploma (NQF 6) is designed to provide both theoretical and practical knowledge, enabling graduates to pursue employment as engineering technicians or to articulate into higher-level qualifications (NQF 7–8)

.

SAQA and DHET Recognition

SAQA accreditation is essential for ensuring that qualifications are recognized by employers, professional councils, and higher education institutions. The process involves:

- Verification of qualification content, assessment methods, and workplace experience.
- Registration of the qualification on the National Learners' Records Database (NLRD).
- Issuance of verification letters and certificates for individual graduates
- .

DHET oversees the quality assurance of NATED programmes and the issuance of diplomas, ensuring alignment with national policy and industry needs

.

Challenges in Recognition

Despite formal recognition, challenges remain in ensuring that NATED engineering diplomas are fully accepted by all stakeholders, including professional bodies such as the Engineering Council of South Africa (ECSA)

. The visit to City Power, with its focus on practical exposure and portfolio assessment, is a step towards addressing these challenges by demonstrating the job-readiness and competence of graduates.

Challenges Encountered During the Visit

While the visit achieved many of its objectives, several challenges were encountered that reflect broader systemic issues in the electricity distribution sector and technical education.

Power Outages and Load Shedding

City Power, like many South African utilities, faces persistent challenges related to power outages and load shedding. These disruptions affected the scheduling and execution of practical activities during the visit. Students and staff reported:

- Missed practical sessions due to unplanned outages.
- Limited access to operational equipment during downtime.
- Increased stress and anxiety among students, mirroring findings from studies on the impact of load shedding on higher education
- .

Such challenges underscore the importance of resilience and contingency planning in technical training programmes.

Delays in Feedback and Documentation

Students reported delays in receiving feedback on their portfolio submissions and assessment records. Contributing factors included:

- Administrative bottlenecks in processing CVs, certificates, and logbooks.
- Limited capacity for timely moderation and verification by DHET and the National Trade Portfolio Exam Department.
- Incomplete or inconsistent documentation from workplace supervisors.

Timely feedback is critical for student motivation and for meeting qualification requirements

.

Documentation Issues

The collection and verification of supporting documentation (CVs, electronic certificates, assessment records) posed challenges, including:

- Variability in the quality and completeness of portfolio evidence.
- Difficulties in obtaining supervisor testimonials and logbook sign-offs.
- Uncertainty regarding the format and content required for portfolio submissions.

Best practices in evidence collection and recordkeeping are essential for ensuring the integrity of the assessment process

.

Complaints About Service Delivery

Students and staff encountered issues related to City Power's service delivery, including:

- Delays in fault response and maintenance, as documented in customer complaints and reviews
- .
- Confusion regarding the roles and responsibilities of different operational units (e.g., the "Test Branch").
- Limited access to certain facilities due to security protocols and site access restrictions.

These challenges highlight the need for clear communication and coordination between educational institutions and industry partners.

Desired Outcomes: Improved Curriculum Relevance, Job Readiness, and Qualification Recognition

The visit to City Power was designed to achieve several interrelated outcomes:

Improved Curriculum Relevance

By engaging directly with industry practitioners, students and lecturers were able to validate the relevance of their curricula and identify areas for improvement. Recommendations include:

- Updating syllabi to reflect emerging technologies (e.g., smart metering, renewable energy).
- Incorporating more practical, hands-on modules and assessments.
- Strengthening partnerships with industry for ongoing curriculum review
- .

Enhanced Job Readiness

The structured workplace exposure provided by the visit is expected to enhance students' job readiness by:

- Developing technical and soft skills required for entry-level positions.
- Building confidence and familiarity with workplace protocols.
- Facilitating the transition from education to employment.

Employers value graduates who can demonstrate practical competence and adaptability

.

Recognition of Engineering Diplomas

The collection and verification of comprehensive portfolio evidence will support the recognition of engineering diplomas by SAQA and DHET. This, in turn, will:

- Enable graduates to access employment opportunities and professional registration.
- Facilitate articulation into higher-level qualifications and further study.
- Enhance the credibility and reputation of participating colleges.

Supporting Documentation: CVs, Electronic Certificates, and Assessment Records

The integrity of the portfolio assessment process depends on the collection and verification of comprehensive supporting documentation. Key components include:

Curriculum Vitae (CV)

A well-structured CV provides a summary of the student's educational background, skills, and work experience. It should include:

- Personal details and contact information.
- Educational qualifications and certificates.
- Details of workplace experience, including roles, responsibilities, and achievements.
- References from supervisors or mentors
- .

Electronic Certificates

Electronic certificates serve as official proof of achievement for completed modules, practical tasks, and workplace experience. They should be:

- Authenticated by the issuing institution or workplace supervisor.
- Aligned with the requirements of the qualification and assessment standards.
- Submitted in a standardized format for verification by DHET and SAQA.

Assessment Records and Logbooks

Assessment records and logbooks provide detailed evidence of workplace activities, competencies demonstrated, and supervisor feedback. Best practices include:

- Regular, structured entries documenting tasks performed, skills acquired, and challenges encountered.
- Supervisor sign-offs and testimonials verifying the authenticity and adequacy of experience.
- Reflection and self-assessment by the student to demonstrate learning and growth
- .

Portfolio of Evidence (PoE)

The PoE is the central document for trade portfolio assessment and diploma issuance. It should be:

- Comprehensive, including all required evidence and supporting documentation.
- Organized according to the exit level outcomes and assessment criteria of the qualification.
- Submitted in both electronic and hard copy formats as required by DHET and the National Trade Portfolio Exam Department.

Assessment and Moderation of Electrical Trade Theory N1–N6 (ICASS and Exams)

Assessment in NATED engineering programmes is governed by a combination of internal and external processes, designed to ensure the validity and reliability of student outcomes.

Internal Continuous Assessment (ICASS)

ICASS includes tests, assignments, projects, and practical tasks conducted throughout the academic term. Key features include:

- Regular formative assessments to monitor student progress.
- Moderation of assessment tasks to ensure consistency and fairness.
- Recording and reporting of marks for inclusion in the final promotion mark
- .

Integrated Summative Assessment Task (ISAT)

The ISAT is a practical assessment conducted at the end of the term, designed to evaluate students' ability to integrate theoretical knowledge with practical skills.

External Examinations

External exams are administered by DHET and serve as the final summative assessment for each module. The assessment framework emphasizes a range of cognitive skills, including:

Skill	Weighting (2023 Syllabus)
Remember	20%
Understand	20%
Apply	20%
Analyse	10%
Evaluate	20%
Create	10%

Table 2: Assessment Weightings for Electrical Trade Theory N1–N6

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Moderation processes ensure that assessment standards are maintained across institutions and that student outcomes are comparable and credible.

Report 191 and National N Diploma Application Process Details

The process for applying for the National N Diploma is governed by DHET policy and involves several key steps:

1. **Completion of Theoretical Modules:** Students must complete N4–N6 certificates in their chosen field, accumulating the required credits.
2. **Workplace Experience:** A minimum of 24 months (2,670 hours) of relevant workplace experience is required for engineering studies, documented in a logbook and verified by a supervisor.
3. **Portfolio Submission:** Students submit a comprehensive portfolio of evidence, including CVs, certificates, logbooks, and supervisor testimonials.
4. **College Verification:** The college reviews and verifies the application, ensuring that all requirements are met.
5. **DHET Evaluation:** The application is forwarded to DHET for final evaluation and approval.
6. **Diploma Issuance:** Upon approval, the National N Diploma is issued and collected from the college
6. .

Timely and accurate documentation is essential for successful application and diploma issuance.

Legal and Dispute Context: CCMA and Labour Court Cases Involving Tshingombe Tshitadi

The broader context of technical education and workplace experience in South Africa includes legal and dispute resolution mechanisms, such as the Commission for Conciliation, Mediation and Arbitration (CCMA) and the Labour Court. Recent cases, including those involving Tshingombe Tshitadi, highlight key issues:

- **Procedural Fairness:** Employers must follow fair procedures in disciplinary and retrenchment processes, including consultation and disclosure of relevant information
- .
- **Consistency in Disciplinary Measures:** Disciplinary actions must be applied consistently across employees to avoid claims of unfair dismissal.
- **Documentation and Recordkeeping:** Clear records of disciplinary processes, consultations, and outcomes are essential for legal defensibility.

These principles are relevant for both educational institutions and workplace partners involved in student placements and experiential learning.

PSIRA Complaint Records Relevant to Security or Site Access Issues

The Private Security Industry Regulatory Authority (PSIRA) oversees the regulation of security service providers in South Africa. Complaints related to security or site access during workplace placements are managed through:

- **Complaints Office:** Established to receive, process, and investigate complaints regarding the quality of service rendered by security providers
- .
- **Procedures and Timeframes:** Detailed procedures and timeframes are in place for the submission, assessment, and resolution of complaints.
- **Dispute Resolution:** Mechanisms for conciliation, settlement, and adjudication are available to resolve disputes.

Educational institutions and workplace partners must ensure compliance with PSIRA regulations to facilitate smooth site access and security during student placements.

SAPS Documentation and Requirements for Student Records or Complaints

The South African Police Service (SAPS) provides mechanisms for lodging complaints related to service delivery, misconduct, or offences committed by police members. Relevant procedures include:

- **Service Complaints Centre:** Investigates complaints related to poor service delivery, communication, response, and investigations
- .
- **Independent Police Investigative Directorate (IPID):** Handles complaints of misconduct or offences committed by SAPS or Municipal Police Services members
- .
- **Documentation Requirements:** Complaints must be supported by detailed documentation, including personal details, incident descriptions, and supporting evidence.

Students and institutions must be aware of these procedures when dealing with incidents or disputes during workplace placements.

City Power Operational and Training Units: Metering, Test Branch, Customer Interface

City Power's operational structure includes several key units relevant to engineering training:

- **Metering:** Responsible for the installation, maintenance, and calibration of electricity meters, including smart metering technologies
- .
- **Test Branch:** Handles fault diagnosis, repair, and quality assurance for electrical infrastructure.
- **Customer Interface:** Manages customer queries, complaints, and service delivery, providing opportunities for students to develop soft skills and customer service competencies.

Engagement with these units provides students with comprehensive exposure to the technical and interpersonal aspects of municipal electricity distribution.

Stakeholder Roles: TVET Colleges, Private Colleges (St Peace College), City Power, DHET, SAQA

The success of workplace-based learning and curriculum assessment depends on effective collaboration among key stakeholders:

- **TVET Colleges and Private Colleges:** Responsible for curriculum delivery, student support, and portfolio assessment.
- **City Power:** Provides workplace exposure, supervision, and feedback on curriculum relevance.
- **DHET:** Oversees policy, quality assurance, and diploma issuance.
- **SAQA:** Ensures qualification recognition and alignment with national standards.

Clear roles and responsibilities, formalized through Memoranda of Understanding (MoUs) and regular communication, are essential for effective partnership.

Evidence Collection and Recordkeeping Best Practices for Portfolio Assessment

Robust evidence collection and recordkeeping are critical for the integrity of the portfolio assessment process. Best practices include:

- **Structured Logbooks:** Regular entries documenting tasks performed, skills acquired, and supervisor feedback.
- **Supervisor Testimonials:** Signed statements verifying the authenticity and adequacy of workplace experience.
- **Electronic Certificates:** Authenticated digital records of achievement for completed modules and practical tasks.

- **Comprehensive Portfolios:** Organized according to exit level outcomes and assessment criteria, including all required supporting documentation
- .

Training for students, supervisors, and assessors on evidence collection and documentation standards is recommended.

Recommendations and Implementation Plan for Curriculum Improvements

Based on the findings of the visit and the broader context of engineering education in South Africa, the following recommendations are proposed:

1. Strengthen Industry Partnerships

- Formalize partnerships between colleges and industry partners through MoUs.
- Establish regular feedback mechanisms for curriculum review and validation.
- Expand opportunities for workplace-based learning and job shadowing.

2. Update and Align Curricula

- Incorporate emerging technologies (e.g., smart metering, renewable energy) into syllabi.
- Emphasize practical, hands-on modules and assessments.
- Align curricula with occupational standards and industry requirements.

3. Enhance Assessment and Moderation Processes

- Standardize assessment methods and moderation procedures across institutions.
- Provide training for assessors and moderators on evidence collection and recordkeeping.
- Implement regular audits of portfolio submissions and assessment records.

4. Improve Documentation and Feedback Systems

- Develop standardized templates for CVs, logbooks, and supervisor testimonials.
- Implement electronic systems for portfolio submission and feedback.
- Ensure timely and constructive feedback to students on assessment outcomes.

5. Address Systemic Challenges

- Develop contingency plans for power outages and operational disruptions.
- Advocate for improved infrastructure and resource allocation to support practical training.
- Engage with regulatory bodies to address challenges in qualification recognition and professional registration.

6. Monitor and Evaluate Outcomes

- Track graduate employment rates, job readiness, and employer satisfaction.
- Conduct regular reviews of curriculum relevance and responsiveness.
- Use data-driven approaches to inform continuous improvement.

Conclusion

The visit by NATED engineering colleges to City Power represents a significant step towards aligning technical education with industry needs, enhancing job readiness, and ensuring the recognition of engineering qualifications in South Africa. Through structured workplace exposure, curriculum validation, and robust portfolio assessment, students are better prepared to meet the demands of the electricity distribution sector and to progress in their careers. Ongoing collaboration among educational institutions, industry partners, and regulatory bodies is essential for sustaining these gains and for addressing the evolving challenges of technical education and workforce development.

Appendix: Summary Tables

Table 3: NATED Engineering Qualification Structure and Requirements

Level	Certificate/Diploma	Credits	Duration	Practical Experience	NQF Level	Recognition
N1	National Certificate	40–60	3 months	None	2	Entry-level
N2	National Certificate	40–60	3 months	None	3	Trade test eligibility
N3	National Certificate	40–60	3 months	None	4	Matric equivalent
N4	National Certificate	60	6 months	None	5	Progression to N5
N5	National Certificate	60	6 months	None	5	Progression to N6
N6	National Certificate	60	6 months	None	5	Progression to Diploma
N Diploma	National N Diploma	360	N4–N6 + 24 mo	24 months (2,670 h)	6	SAQA/DHET recognized

Table 3: NATED Engineering Qualification Structure

.

Table 4: Assessment Components for Electrical Trade Theory N1–N6

Assessment Type	Description
ICASS	Internal Continuous Assessment: tests, assignments, projects

Assessment Type	Description
ISAT	Integrated Summative Assessment Task: end-of-term practical
Exams	External summative assessments by DHET

Table 4: Assessment Components

Table 5: Key Stakeholders and Roles

Stakeholder	Role
TVET Colleges	Curriculum delivery, student support, portfolio assessment
Private Colleges	As above (e.g., St Peace College)
City Power	Workplace exposure, supervision, curriculum feedback
DHET	Policy, quality assurance, diploma issuance
SAQA	Qualification recognition, NQF alignment
National Trade Portfolio Exam Dept	Portfolio assessment, moderation

Table 5: Stakeholder Roles

This comprehensive report synthesizes the findings, challenges, and recommendations arising from the City Power visit, providing a roadmap for continuous improvement in engineering education and workforce development in South Africa.

References

30

- 1regqs.saqa.org.za

SAQA

- 2www.swgc.co.za

Report 191 / Nated N1 – N6 – SWGC – Welcome

- 3unisasapplication.co.za

City Power: 2025 Electrical Engineering Traineeship Programme

- 4www.citypower.co.za

Careers - City Power

- 5www.gov.za
Continuing Education and Training Act and National Qualifications ...
- 6www.engineeringnews.co.za
AIE is redefining engineering education as legacy N-programmes are ...
- 7statuscheck.co.za
SAQA Accreditation: How to Check if Your Qualification is Valid in 2025
- 8www.dhet.gov.za
Research Report on Curriculum Relevance and Responsiveness of selected ...
- 9www.macmillaneducation.co.za
breaks down the changes between the old and new NATED curricula. TVET ...
- 10www.dhet.gov.za
Teaching and Learning Plan 2025 - dhet.gov.za
- 11www.joburgetc.com
Claiming Damages from City Power in Johannesburg 2025
- 12www.iepa.org.za
Smart Metering Application Training - SMAT - iepa.org.za
- 13www.sseg.org.za
Session 3.2 Metering Systems - NECOM Wheeling Training Programme ...
- 14www.dhet.gov.za
REPORT 191 PROGRAMME SYLLABUS - dhet.gov.za
- 15pscbc.org.za
Learner Portfolio of Evidence SKILLS DEVELOPMENT PROGRAMME - PSCBC
- 16www.skillsacademy.co.za

How to Create a Portfolio of Evidence | ICB Courses

- 17inseta.org.za

INSETA LEARNERSHIP WORKPLACE EXPERIENCE LOGBOOK
INSTRUCTIONS 1.

- 18institutebm.org.za

workplace logbook - institutebm.org.za

- 19www.qcto.org.za

For assessment centres - QCTO

- 20www.regenesys.net

NQF Level 6 vs Level 7 | Differences & Careers | 2025

- 21www.aie.ac

Diploma in Electrical & Electronics Engineering NQF6

- 22community.marketdirect.co.za

NQF Levels in South Africa by South African Qualifications Authority (SAQA)

- 23www.saqa.org.za

SAQA Verifications Service

- 24www.saqa.org.za

Check Accreditation status - SAQA

- 25www.citypower.co.za

City Power

- 26www.studocu.com

Report 191 - NATED Programmes in Public Management & Engineering

- 27www.saflii.org

THE LABOUR COURT OF SOUTH AFRICA, JOHANNESBURG

- [28www.parliament.gov.za](http://www.parliament.gov.za)

PSIRA - ANNUAL REPORT 2024 | 2025

- [29www.saps.gov.za](http://www.saps.gov.za)

Services | SAPS (South African Police Service)

- [30www.wikiprocedure.com](http://www.wikiprocedure.com)

South Africa - Application to lodge a complaint on misconduct



This is to certify that

TSHINGOMBE TSHITAFI NATED

having satisfied the conditions prescribed by the

SAQA - Ndiplooma

was awarded this Diploma in

**Electrical Engineering
(Heavy Current)**



Issued: 01-12-2000

A handwritten signature in black ink, appearing to be 'Ruth'.

ST. PEACE COLLEGE

SAQA N DIPLOMAT

This is to certify that

TSHINGOMBE TSHITADI

has been awarded a

NATIONAL DIPLOMA
ENGINEERING
ELECTRICAL



ST. PEACE COLLEGE

ST. PEACE COLLEGE



This is to certify that

TSHINGOMBE TSHITADI

having successfully completed the requirements by
the General Academic Council for the degree of

Doctor of Electrical Engineering
with Honours



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President



**department
higher education**

Department.
Higher Education and Training
**REPUBLIC OF
SOUTH AFRICA**



STATEMENT OF RESULTS

This is to certify that

TSHINGOMBE TSHITADI

has been awarded a following

whereupon this

CERTIFICATE AND DIPLOMA

is hereby awarded

NQF LEVEL	SUBJECT	RESULT
N1	Mathematics	Passed
N2	Engineering Science	Passed
N3	Electrical Trade Theory	Passed
N4	Electrotechnics	Passed
N5	Industrial Electronics	Passed
N6	Industrial Orientation	Passed
N4	Plant Operation	Passed
N6	Orientation	Passed
N6	Industrial	Passed

Issued Official



ST. PEACE COLLEGE

01.12.2022

RECORD CERTIFICATE TRANSCRIPT

This is to certify that

TSHINGOMBE TSHITADI

has been awarded a

CERTIFICATE DIPLOMA

STATEMENT

LEVEL	SUBJECT
N1	Mathematics
N2	Engineering Science
N3	Electrical Trade Theory
N4	Electrotechnics
N5	Industrial Electronics
N6	Industrial Orientation
N6	Plant Operation

ST. PEACE COLLEGE


President



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**department
higher education**

Department
Higher Education and Training
**REPUBLIC OF
SOUTH AFRICA**



CERTIFICATE AND DIPLOMA

This is to certify that

TSHINGOMBE TSHITADI

has satisfied the following whereupon

CERTIFICATE AND DIPLOMA

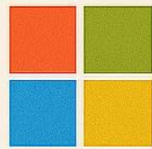
is hereby awarded

NQF LEVEL	SUBJECT	RESULT
N1	Mathematics	Passed
N2	Engineering Science	Passed
N3	Electrical Trade Theory	Passed
N4	Electrotechnics	Passed
N6	Industrial Orientation	Passed
N6	Industrial	Passed
N6	Plant	Passed
N6	Orientation	Passed

Issued Official

01.12.2022

ST. PEACE COLLEGE



Microsoft

CERTIFICATE OF COMPLETION

This is to certify that

TSHINGOMBE TSHITADI

has successfully passed the assessment of

Engineering, Azure, GitHub

has successfully assessed as

Engineering, Azure, GitHub

with Honours

Ryan Morris
Microsoft Representative



01.12.2022



department higher education

Department.
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

DIPLOMA

This is to certify that

TSHINGOMBE TSHITADI

having satisfied the conditions prescribed in
respect of combination of NATED NC(V) subjects

is hereby awarded

**Doctor of Electrical
Engineering**

with Honours



Issued Official

Registrar

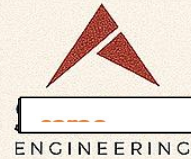
Issued, 01-12-2000

ST. PEACE COLLEGE

TRANSCRIPT

RNF

DIPLOMA AWARDED TO



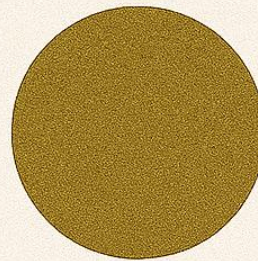
**TSHINGOMBE
TSHITADI**

is hereby granted a diploma in

ENGINEERING

with Flotonurs

Registrar



Issued, 02-28-2020

**SAROO
ENGINEERING**



TRANSCRIPT

This certifies that

TSHINGOMBE TSHITADI

has been granted a diploma in

SARAO ENGINEERING

Awarded: 21-07-2025



Ryan Morris

NRF Representative

TRANSCRIPT 01.12.2025



nrfconnect@nrf.ac.za
Nov 14, 2025, 2:36 PM (12)

TRANSCRIPT OF AWARD

Dear Tshingombe Tshitadi

This certifies that the NRF to continue provide input for an application to the NRF. In order for the NRF to continue with the evaluation of the application, we would be most grateful if you could submit the required input for the applicant.

Applicant: Mr Tshingombe Tshitadi
Email Address: tshingombefiston@gmail.com

Opportunity	Reference	Status
SARAO Bachelor in Engineering Technology and Diploma in Engineering Technology Scholarships TSHINGOMBE TSHITADI	SBDET250721 346098	Designated Authority Submission Review

Ryan Morris
Microsoft Representative

Issued, 01-12-2022

ST. PEACE COLLEGE



DIPLOMAT

is granted that

TSHINGOMBE TSHITADI

in recognition of the successssful
completion of the RNF Award
conferred by SAROO Engineering

DIPLOMA



President

is granted to

President

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ST. PEACE COLLEGE

COURSEWORK TRANSCRIPT

Course Assessment

Internal Assessment

Quality assurance 2017 - Awarding Procedures

ENGINEERING

Holistic Judgement

Course Details

- Course Profiles Assessment
 - Development Fundamentals for Vocational Qualifications
 - Delivering and Marking SQA Advanced Qualification Graded Units
 - Personal Finance Award SCQF Level 6
 - Developing a Coaching Mind-Set
- Virtual Work Experience
-

Webinar: Online Standards Development
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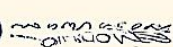
SBDET250721346098

21/07/2025

Designated Authority Submission Review



Ryan Morris NRF Representative

SCQF Level D 



IJETR

International Journal of Engineering &
Technical Research

(AN ISO 9001:2008 CERTIFIED INTERNATIONAL JOURNAL)

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has participated in the research
published by this diploma reposit

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Employment (1)

Atlantic International University: Honolulu, US

2023-02 to present | Engineering (Engineering)

Employment

[Employment](#)

Show more detail | Source :

tshingombe tshingombe

Education and qualifications (1)

Microsoft (United States): Redmond, US

2024-02-02 to 2027-02-02 | Engineering

Education

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Education technology engineering

2024-02 to 2026-01 | Award / Award (Alexandria, US)

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MINI COURSE

CERTIFICATE

THIS IS TO CERTIFY THAT

**TSHINGOMBE
TSHITADI**

HAS SUCCESSFULLY COMPLETED
A COURSE FOR THIS DIPLOMA
REPOSITORY

ON-12-2025

HAS SUCCESSFULLY COMPLETED
A COURSE



IJETR Profile Number
IJETR3183



President



Certified:
01-12-2025

Completed Mini Courses to Download

Download Mini Course Certificates

Click 'download' to obtain your Mini Course Certificate for the Mini Courses you've watched, marked as completed, and paid \$25 for each. This list will exclusively display those certificates available for download. If any certificates are missing, please ensure you've marked those mini courses as watched, updated accordingly, and completed the \$25 payment for each.

Subject	Date	Action
Clean Energy Technology, Ecotechnology Applications	02/06/2025	download
Integration of Electronic Engineering in Construction and Civil Engineering	02/06/2025	download
Masters In Immutable Data Storage Solutions for Web Design	02/06/2025	download
Advanced Cyber-Physical Systems in Telecommunications	02/06/2025	download
Master's Program in Artificial Intelligence and Machine Learning for Software Engineering	02/06/2025	download
Advanced Studies in Autonomous Vehicles and Drones for Electric Vehicle Engineering	02/06/2025	download
Specialist Engineering in Infrastructure and Contractors: Electrochemical Engineering	02/06/2025	download
Energy Storage and Battery Technology	02/06/2025	download
Advanced Robotic Process Automation in Electrical Engineering	02/06/2025	download
Master's in Artificial General Intelligence and Social Sciences	02/06/2025	download



Atlantic
International
UNIVERSITY

CERTIFICATE

This is to certify that

**TSHINGOMBE
TSHITADI**

**DOCTORAL ENGINEERING
ELECTRICAL**

SUBJECT: BUILD CURRICULUM

IJITR Profile Number ID

IJETR3183



Certified, 01-12-2025

Completed Mini Courses to Download

Download' to obtain your Mini Course Certificate for the Mini Courses you've watched as completed, and paid \$25 for each. This list will exclusively display those certificates for download. If any certificates are missing, please ensure you've marked those mini courses as watched, updated accordingly, and completed the \$25 payment for each.

Completed Mini Courses

Project Lifecycle & Stakeholder Engagement

[Download Mini Course Certificate](#)

Economic Collaboration Junctions with SMEs in "Project Management" with an Emphasis on Saudi Arabia

[Download Mini Course Certificate](#)

Importance of Standardization for the Propagation of Innovation

[Download Mini Course Certificate](#)

Introduction to Project Management

[Download Mini Course Certificate](#)

Download Mini Courses

Completed Mini Course Certificate

[Download Mini Course Certificate](#)

My Courses: Tshingombe fiston

Use the transcript to manage all active training.

14:15 HRS

AGOREGAF TRAINING COMPLETED 14:15

AGGREGATE TRAINING COMPLETED 14:15

FISCAL YEAR ENDING 12/31/2025

COST R0.00

Filter by Training Status: Active

Sort by Date Added

Filter by Training Type: All Types

Search

Search Results (140)

Schndder Home Certification	Due : No Due Date	Training Type: Curriculum	Active
Industrial Automation Using EcoStruxure Automaion Expert	Due : No Due Date	Training Type: Curriculum	Active
Wind Energy Fundamentals	Due : No Due Date	Online Class: Online Class	Active
EBO 2024: Advanced Engineering	Due : No Due Date	Training Type: Curriculum	Active
Professional Energy Manager Esain LearningPath	Due : No Due Date	Training Type: Curriculum	Active
EBO 2023: Engineering EBO	Due : No Due Date	Training Type: Curriculum	Active
EBO 2023: Engineering Upgrade	Due : No Due Date	Online Class: Curriculum	Active
Sustainability to Modicon Switches	Due : No Due Date	Training Type: Online Class	Active
Advanced Electrical Safety (Multiniingal)	Due : No Due Date	Training Type: Curriculum	Active
How to Perform's Security Code Review	Due : No Due Date	In Progress: Online Class	Active
FcoStruxure Building: Prescription: Mechatcal & Control - Part 1	Due : No Due Date	In Progress: Test	Failed
MotionSizer for PacDrive 3 (VILT)	Due : No Due Date	In Progress: Curriculum	Active
EcoStruxure Building: Prescription ad/Fond Geographic Inform.	Due : No Due Date	In Progress: Test	Failed
MotionSizer for PacDrive 3 [Test]	Due : No Due Date	In Progress: In Progress	Failed
EcoStruxure Vnde- Destination Accurda	Due : No Due Date	Training Type: Test	Failed

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Impact Company

Content

Training

Installed Base

Programs

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anscript to manage all active training.

14,15 HRS

FISCAL YEAR ENDING

R0.00

AGGREGATE TRAINING
COMPLETED

12/31/205

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Date Added ▼

Filter by Training Type All ▼

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Due Date

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Type : Curriculum

Status : Active

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Try our Product &

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My Courses: Tshingombe Fiston

Use the transcript to manage all active training.

14.15 HRS

AGGREGATE TRAINING.COMPUTED

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12/31/2025

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Filter by Training Status Active Sort by Date Added

Filter by Training Status

All Types

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Search Results (140)

Search Results (140)

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Selector

Schneider Home Certification

Due : No Due Date

Status : In Progress

Training Type : Curriculum

Training Status : Active

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Product Selector Tool

Due in Progress

Training Type : Active Active

Hello
tshingc

Content

Training

Installed Ba

Programs

mySchneider

User requests

Products

Installed Base

Programs

Certificate

This is to certify that

TSHINGOMBE TSHITADI

ID Number 81052862880085

has fulfilled the requirements for the
qualification as a

**ASESSOR / MODERATOR
ENGINEERING ELECTRICAL**

Date of Issue: 2024-04-04

SAQA Reg. No: 649703717

President



Burton Naicker



This is to certify that

Tshingombe Tshitad

is a competent

ENGINEERING ASSESSOR

and **MODERATOR**

at NQF level 5

A handwritten signature in black ink, appearing to read 'S. Tshitad', is written over a horizontal line.

Authoized Signature

22 December 2024

Issue Date

Schneider Electric

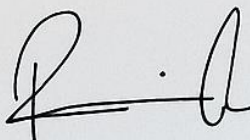
**QUOR RECTIFICATE TESTE GRADE
ENGINEERING TRADES MAN CERTIFICATE**

This is to certify that

Tshingombe Tshitiadi

Occupation

Engineering Fabrication



Registrar





Department of
Higher Education
and Training

REPUBLIC OF
SOUTH AFRICA

QCTO

QUALITY COUNCIL FOR
TRADES AND OCCUPATIONS

My Courses: Tshingombe Fiston

Use the transcript to manage all active training.

14.15 HRS

AGGREGATE TRAINING COMPLETED

FISCAL YEAR ENDING 12/31/2025

conducted at **ST PEACE COLLEGE**

on 2024-06-21 and is therefore

**AWARDED THIS NATIONAL
CERTIFICATE (TRADE TEST)**

at level 4 of the National Qualifications
Framework (NQF).

mySchneider
Electric

Impact Company

Dr. Thulani Gcabashe

Chief Executive
Officer
QCTO

mySchneider Terms of Use 2025



**QUOR RECTIFICATE TESTE GRADE
ENGINEERING TRADES MAN CERTIFICATE**

This is to certify that

Tshingombe Tshitad

Occupation

Engineering Fabrication

A handwritten signature in black ink, appearing to be 'P. A.', is written over a horizontal line.

Registrar





This is to certify that

TSHINGOMBE TSHITADI



ASSESSOR / MODERATOR

is a competent of

Engineering Fabrication

Security Management Electronics

Engineering

ST PEACE COLLEGE ASSESSMENT POLICE

ST FEACEOLLEGE ASSESSMENT POLICE

22 December 2024



PSIRA

PRIVATE SECURITY INDUSTRY
REGULATORY AUTHORITY

CERTIFICATE

This is to certify that
TSHINGOMBE TSHITADI 
has fulfilled the requirements for the
qualification as a
**ASSESSOR / MODERATOR
ENGINEERING ELECTRICAL**
at St Peace College
and is therefore awarded this
NATIONAL CERTIFICATE (TRADE TEST)
at level 4 of the National
Qualifications Framework (NQF)



Simon Bienart
Director



SASSETA





**METROPOLITAN
POLICE**

SERVICE

CERTIFICATE

This is to certify that

Tshingombe Tshitadi

holds a

**BLOCK MARK LICENCE IN
ENGINEERING**

Occupation: **ENGINEERING
ELECTRICAL**

conducted at **ST PEACE COLLEGE**

on 2024-06-21 and is
therefore awarded this
**NATIONAL CERTIFICATE
(TRADE TEST)**
at level 4



Or Thulani Gcabashe
Chief Executive Officer OCTO



NATIONAL CERTIFICATES (VOCATIONAL)

DIPLOMA

AWARDED IN

**ENGINEERING STUDIES
(ELECTRICAL)**

**TSHINGOMBE
TSHITADI**

EXECUTIVE OFFICER

A blue ink signature of the Executive Officer.

ENTRY LEVEL

COURSE LEVEL

N4





REPUBLIC OF SOUTH AFRICA
DEPARTMENT OF HIGHER EDUCATION AND TRAINING
awards

National N Diploma
IN ELECTRICAL ENGINEERING

to,

Tshingombe Tshitadi

who has satisfied the requirements for the award of a National N Diploma by obtaining Certificates N1, N2, N3, N4, N5, and N6 in the Engineering Studies majoring in the following subjects:

Mathematics
Engineering Science
Engineering Drawing
Electrical Trade Theory
Industrial Electronics
Orientation Industrial
Plant Operational
Electrotechnical
Electrotechnology



Permanent Secretary

ID -- 4861340498015

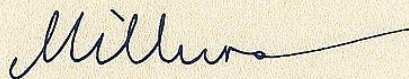
01/08/2021

SAQA
SANATED
DIPLOMA
ENGINEERING
STUDIES
(ELECTRICAL)

TSHINGOMBE
TSHITADI

Mathematics	Orientation Industrial
Engineering Science	Plant Operation
Engineering Drawing	Electrotechnics
Electrical Trade Theory	Electrotechnology
Industrial Electronics	

**DIRECTOR OF
FINAL ASSESSMENT**



MIHULWA SEROBE

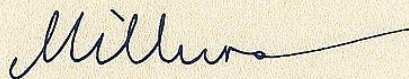

SAQA
SANATED

SAQA
SANATED
DIPLOMA
ENGINEERING
STUDIES
(ELECTRICAL)

TSHINGOMBE
TSHITADI

Mathematics	Orientation Industrial
Engineering Science	Plant Operation
Engineering Drawing	Electrotechnics
Electrical Trade Theory	Electrotechnology
Industrial Electronics	

**DIRECTOR OF
FINAL ASSESSMENT**



MIHULWA SEROBE


SAQA
SANATED

NATED



DIPLOMA

ELECTRICAL ENGINEERING

TSHINGOMBE TSHITADI

DIPLOMA

ELECTRICAL ENGINEERING

Mathematics
Engineering Science
Engineering Drawing
Electrical Trade Theory
Industrial Electronics
Orientation Industrial
Plant Operational
Electrotechnical
Electrotechnology

ST PEACE COLLEGE
N1 to N6 Engineering Studies

A stylized, handwritten signature in black ink, likely belonging to the Issuing Officer.

ISSUING OFFICER



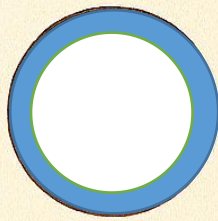
NATED
QCTO TEST TRADE

DIPLOMA
ELECTRICAL ENGINEERING
TSHINGOMBE TSHITADI
TRANSCRIPT RECORD

Mathematics
Engineering Science
Engineering Drawing
Electrical Trade Theory
Industrial Electronics
Orientation Industrial
Plant Operational
Electrotechnical
Electrotechnology

ST PEACE COLLEGE

IMAGING OF RECER



ST PEACE COLLEGE

DEPARTMENT OF HIGHER EDUCATION & TRAINING

NATED QCTO TRADE TEST QCTO

Irregularity • Material • Final

**DIPLOMA
ELECTRICAL ENGINEERING
TSHINGOMBE TSHITADI
TRANSCRIPT RECORD**

**Mathematics
Engineering Science
Engineering Drawing
Electrical Trade Theory
Industrial Electronics
Orientation Industrial
Plant Operational
Electrotechnical
Electro-technology**

**ST PEACE COLLEGE
N1 TO N6**

DIPLOMA

**ST PEACE
COLLEGE**

Courses in Curriculum	Credit value of the course	FTE student Total
Industriel electronics	n1	
Electronical trade theory	n3	
Mathematics	n4	


IHAGING OF RECER

DHET NN DIPLOMA

WEIGHTING OF COURSES

CERTIFICATE ENGINEERING STUDIE / N DiplomaENGINEERING

Course in curriculum

Industrial electronics n1
Engineering drawing n1
Mathematics n1

Industrial electronics n1
Electronical trade theory n3
Engineering science n3
Electro- technology n3
-electrical trade theory n3
-electrical technology n3

Electrotechnics n4
Industrial electronics n4
Engineering science n4
Mathematics n4

N2 SCALING PLACEMENT

Certificate	Census day enrolments	Credit value of the course	FTE
Industrial electronics n1	0.33	0.33	1
Engineering drawing n1	0.33	0.33	1
Electrical trade theory n1	0.33	0.33	1
Mathematics n1	0.33	0.33	1
N2 SCALING PLACEMENT			
Industrial electronics n3	0.33	0.33	1
Electronical electronics n4	0.33	0.33	1
Engineering science n4	0.33	0.33	1
Mathematics	0.33	0.33	1

Certificate



**SAQA
NATED**

STATEMENT OF RESULTS

Irregularity Material Final

DIRECTOR: ASSESSMENT

N DIPLOMA

ELECTRICAL ENGINEERING

TSHINGOMBE TSHITADI

The participant obtained Certificates N1, N2, N3, N4, N5, and N6 in the Engineering Studies majoring in the subjects listed below:

Mathematics
Engineering Science
Engineering Drawing
Electrical Trade Theory
Industrial Electronics
Orientation Industrial
Plant Operational
Electrotechnical
Electrotechnology



ISSUING OF RESULT

ISSUING OFFICER

NATED
TRANSCRIPT RECORD
DIPLOMA
ELECTRICAL ENGINEERING
to,
TSHINGOMBE TSHITADI

Mathematics
Engineering Science
Engineering Drawing
Electrical Trade Theory
Industrial Electronics
Orientation Industrial
Plant Operation
Electrotechnics
Electrotechnology

DIRECTOR OF
FINAL ASSESSMENT



ASSANDA PILAYE



SAQA
SANATED

NATED
Irregularity • Material • Final
DIRECTOR:ASSESSMENT
N DIPLOMA
ELECTRICAL ENGINEERING
TRANSCRIPT RECORD
TSHINGOMBE TSHITADI
TRANSCRIPT RECORD

The participant obtained Certificates N1, N2, N3, N4, N5
and N6 in the Engineering Studies majoring in the
subjects listed below.

Mathematies
Engineering Science
Engineering Drawing
Electrical Trade Theory
Industrial Electronics
Orientation Industrial
Plant Operationel
Electrotechnical
Electrotechnology

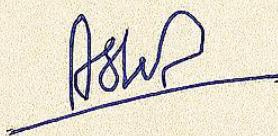

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DIPLOMA
ELECTRICAL ENGINEERING
TSHINGOMBE TSHITADI

TRANSCRIPT RECORD
ELECTRICAL ENGINEERING

Mathematics
Engineering Science
Engineering Drawing
Electrical Trade Theory
Industrial Electronics
Orientation Industrial
Plant Operational
Electrotechnics
Electrotechnology

DIRECTOR OF
FINAL ASSESSMENT


ASSANDA PILAYE

ST PEACE COLLEGE



DEPARTMENT OF HIGHER EDUCATION & TRAINING

STATEMENT OF RESULTS

WEIGHTING OF COURSES CERTIFICATE ENGINEERING / N DIPLOMA ENGINEERING

Course in curriculum	Certificate	Census day enrolments	Credit value of the course	FTE student Total
Industrial electronics N1	Courses in Curriculum			
Engineering drawing N1	Industrial electronics N1			0.33
Electrical trade theory N1	Engineering drawing N2			0.33
Mathematics n1	Electrical trade theory N1			0.33
Industrial electronics N3	Mathematics			0.33
N2 SCALING PLACEMENT	Electrotechnics n4			0.33
Industrial electronics n3	Industrial electronics n3			0.33
Electronical trade theory n3	Engineering science n4			0.33
Engineering science	Mathematics			0.33
Electro- technology n3				
-Industrial orientation n3				
-plant operation theory n3				
-electro - technology n3				
-electrical trade theory n3				
Electrotechnics n4				
Industrial electronics n4				
Engineering science n4				
Mathematics n4				
	Census day	Credit value of the course	FTE student Total	
	Industrial electronics	0.33		1
				1

ST PEACE COLLEGE N1 TO N6

DHET

nn DIPLOMA

UCPD • BACHELOR • DOCTORAL

WEIGHTING OF COURSES

**CERTIFICATE ENGINEERING STUDIES / N DIPLOMA
ENGINEERING**

TSHINGOMBE

**Industrial electronics
n1**

Engineerring drawing n1

Electrical trade theory n1

Mathematics n1

Industrial electronics n1

Electrical trade theory n1

Mathematics n1

N2 SCALING PLACEMENT

Industriel electronics n3

Electronical trade theory
n3

Electro- technology n3

N2 SCALING PLACEMENT

Industriel electronics n3

Electronical trade theory n3

Engineering science n3

Electro- technology n3

-Industrial orientation n3

-plant operation theory n3

-electro-technology n3

-electrical trade theory n3

Electrotechnichnics n4

Industrial electronics n4

Engineering science n4

Mathematics n4

ST PEACE COLLEGE

N1 TO N6

APPROVED BY: QCTO

TRANSCRIPT RECORD

PROFILE REVIEW

Issued to

Tshingombe

Skill Assessment

Self-assess your skills to provide additional context to recruit
reviewing your application and profile.

All Skills

Stakeholder Communication

Expert

The last time the skill was utilized
Jacobs Engineering (Engineering)



Certificate of Profile Review

tshingombe tshitadi

Skill Assessment

Self-assess your skills to provide
additional context to recruiters
reviewing your application and profile.

All Skills

Stakeholder Communication

Expert

The last time the skill was utilized
Jacobs Engineering (Engineering)

Transcript Record

Modderateř asessor

Administration > My Profile

User Id	127952
User Name	Tircq0000106
E-mail Address	tshingombefiston@gmail.com
Account Active	External User
User Type	Assessor

Provider Name Assessor

◀ seek · w ▶ ◀ 1 - 1 of 1 items see & e →		
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**SASSETA Moderator
Assessor
Engineering**

**tshingombe
St Peace College
DHET**



higher education
& training

Department of
HIGHER EDUCATION
AND TRAINING

ENGINEERING STUDIES / N DIPLOMA ENGINEERING

WEIGHTING OF CERTIFICATE COURSES IN CURRICULUM

INDUSTRIAL ELECTRONICS N1	N1		
ENGINEERING DRAWING N1	INDISCLAING PLACEMEN N3		
ELECTRICAL TRADE THEORY N1	INDUSTRIAL ELECTRONICS N3		
MATHEMATICS N1	ELECTRICAL TRADE THEORY N3		
N2 SCALING PLACEMENT	ENGINEERING SCIENCE N3		
	ELECTRO-TECHNOLOGY N3		
	-PLANT OPERATION THEORY N3		
	-ELECTRO-TECHNOLOGY N3		
INDUSTRIAL ELECTRONICS N3	-ELECTRICAL TRADE THEORY N3		
ELECTRICAL TRADE THEORY N3			
ENGINEERING SCIENCE N3			
ELECTRO-TECHNOLOGY N3	N4		
	ELECTROTECHNICS N4		
	INDUSTRIAL ELECTRONICS N4		
	ENGINEERING SCIENCE N4		
	MATHEMATICS N4		
Course	Consus day enrolments	Credit value of the course	FTE student total
INDUSTRIAL ELECTRONICS N1	0.33	1	
ELECTRICAL TRADE THEORY N3	0.33	1	
ENGINEERING SCIENCE N3	0.33	1	
ELECTRO-TECHNOLOGY N3	0.33	1	
-INDUSTRIAL ORIENTATION N3	0.33	1	
-PLANT OPERATION THEORY N3	0.33	1	
-ELECTRO-TECHNOLOGY N3	0.33	1	

Recent applications

Submission No	Name	Date	Status	Electronic	Electronic Certificate
2022076665098	I'shitadi 'Ishingombe	2024-08-12 11:36	Submitted	Certificate	
2022111630911	I'slion tshingombe	2022-06-03:09:36	Pending	Document(s)	
2023031185021	I'shtadi Fislattgronite	2024-05-11.18.45	Pending	Document(s)	
202207128014	Ishitadi "shingombe	2024-07-15 13.31	Pending. Document(s)	Pending, NCV and writtber reinbrnation STPEACE COLLEBHI	

Courses in Curriculum Weighting of Courses

- Industriel electronics n1
- Engineering drawing n1
- Electrical trade theory n1
- Mathematics n1
- Industriel electronics n1
- Electrical trade theory n1
- Mathematics n1
- **N2 SCALING PLACMNT**
- Industriel electronics n3
- Electronical trade theory n3
- Engineering science n3
- -Industrial orientation n3
- -plant operation theory n3
- -electro – technology n3
- Electrical trade theory n3

Certificate Courses in Curriculum

Census day enrolments	Credit value of the course	FTE student	Total
Industriel electronics n1	0.35	1	1
Engineering drawing n1	0.33	1	1
Electrical trade theory n1	0.33	1	1
Mathematics n1	0.33	1	1
Industrial electronics n1	0.33	1	1
N2.SCALING/PLACEMENT	0.33	1	1

have any enquiries. Recent applications

Submission No	Name	Date	Satus	Status	
Electronic Certificate	Tshitadf Tshingombe	2024-02-42-11:36	Submitted	Submitted	
Tenirronic Certificate	Tshitadf Tshingombe	2023-08-02-08:56	Pending Documenti(s)		

WEIGHTING OF COURSES IN CURRICULUM

Name of student

ENGINEERING STUDIES / N DIPLOMA ENGINEERING

Course in curriculum

INDUSTRIAL ELECTRONICS N1

ENGINEERING DRAWING N1 - Industrial electronics N3

ELECTRICAL TRADE THEORY N1 - Electrical trade theory 33

MATHEMATICS N1 - Engineering science n3

N2 SCALING PLACEMENT - Electro- technology n3

INDUSTRIAL ELECTRONICS N3 - Plant operation theory n3

ELECTRONICAL TRADE THEORY 3 - electro- technology n3

MATHEMATICS N3 - electrical electrochemistry

Industrial electronics N3 mathematics

Engineering science n4 electrotechnical

Industrial electronics N4 industrial electronic

engineering science

Course	Census day enrolments	Credit value of the course	FTE student Total
INDUSTRIAL ELECTRONICS N1	0.33	1	1
ENGINEERING DRAWING N1	0.33	1	1
ELECTRICAL TRADE THEORY N1	0.33	1	1
MATHEMATICS N1	0.33	1	1
N2 SCALING PLACEMENT	0.33	1	3

Recent applications

Submission No	Name	Date	Status	Electronic Certificate
2022070865055	Tshitadi Tshingombe	2024-02-12.11.36	Submitted	
202211165061	fiston tshingombe	2023-06-03.09.56	Pending Document(e)	
202303115021	Tshradi Fiston Tshingombe	2023-03-11 13.45	Pending Document(e)	
202207125014	fshitadi tshingombe	2023-01-16 13.31	Pending, NCV and RATED combination / St PEACE	

Doctoral Master Bachelor UC PD PRecord: DHET NN Diploma in Engineering Certificate

Course In Curriculum Tshingombe Tshad

- Industriel ellectronics n1
- Engineering drawing n1
- Electrical trade theory n1
- Mathematics n1
- Industriel ellectronics n1
- Electrical trade theory n1
- Mathematics n1
- **N2 SCALING PLAEMENT**
- Industriel Electronics N3
- Electronical Trade theory n3
- Engineering science n3
- –Industrial orientation n3
- –plant operation theory n3
- –electro –technology n3
- Electrical trade theory N3
- Electrotechnichnics N4
- Industrial Electronics N4
- Engineering science N4
- Mathematics Electrotechnical

Certificate Courses in Curriculum

Course	Census day enrolments	Credit value of	Total
Industriel electronics n1	0.33	1	1
Engineering drawing n1	0.33	1	1
Electrical frade theory n1	0.33	1	1
Mathernatics n1	0.33	1	1
Industrial electronics n1	0.33	1	1
Electrical frade theory n1	0.33	1	1
Mathernatics n1	0.33	1	1

have any enquiries Recent applications

Submission No	Name	Date	Status	Status
2022679999995	Tshited/ Tshingombe	2024-02-12. 11:35	<i>Sunblited</i>	
202211189991	Fshon1shingombe	2023-06-03. 09:58	Pending_Document(s)	
202303110031	Tshited/ Eston Tshingombe	2023-03-13. 13:48	Pending_Document(s)	



Mour Monthly Learner Report

Amp:  Trending
set your At learning you, ll earn

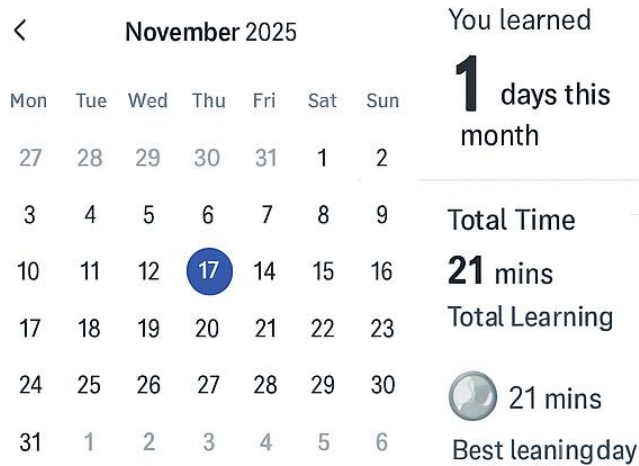


Your Monthly Learner Report is in!

Check out your stats for the month, see how you're growing, and aim to achieve even more month!



Learning Stats in November



21 mins

Total Time Learning

1 Brvree
1 Silver Browes

Average number of hours you learn on de 2h



Want to make more achievements!

Keep learning and ad

My Learning in November



Your Learning in November



50 Million + Learners



Your Learning in November
Courses in Progress



You completed zero courses in November

Alison Graduates



Psychometric Assessment
11 November

Psychometric Assessment for caregivers and Counsellors
Enrolled on 17th November, 2025

Alison Graduates

View Your Profile

South Africa

Graduation Year

Country



tshingombe
fiston

ZAF South Africa
Jun 25

ZAF South Africa
Jun 25

View Your Profile



tshingombe
fiston

ZAF South Africa
Jun 25

ZAF South Africa
Jun 25

View Your Profile



tshingombe
fiston

ZAF South Africa
Jun 25

ZAF South Africa
Jun 25

View Your Profile

Alison Graduate Certificate

Check out your stats for the month, see how you're growing, and aim to achieve even more next month!



Learning Stats in November

November 2025

Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1
2	3	4	5	6	8
9	10	11	12	13	14
16	17	18	19	20	21
23	24	25	26	27	28
30					

Days you learnt

1 days this month

0 days less
than last lamonth

Best time Learning

 **21 mins**

Best learning day

 the new
Learner

 **0 Gold**

Learn 3 days in
a week to earn
Gold

 **1 Silver**

Learn 2 days in
a week to earn
Silver

 **1 Bronze**

Learn 1 day in
a week to earn
Bronze

Goals and Achievements in November

 **0** Courses you completed

 **0** Certificates you claimed

 **1** Courses in progress
83%

Keep learning and add more
achievements!

Your Learning in November

 **0** Courses you completed

 **0** Certificates you claimed





Dhet SAQA Discovery Award

Prize for Research Innovation

tshingombe tshitadi

NATED NCV Curriculum
Engineering Moderator Facilitator
Prize Achievement Meritus
Career Mentor

IN DIPLOMA DISCOVERY

Electrical Engineering Didactic Material
for Learner



Electrical Engineering Didactic
Material for Learner



Dhet SAQA Discovery Award

Prize for Research Innovation

tshingombe tshitadi

NATED NCV Curriculum

Engineering Moderator Facilitator

Prize Achievement Meritus

Career Mentor

IN DIPLOMA DISCOVERY

Electrical Engineering Didactic Material
for Learner

SciBono Journey Expert Assessment Library

Digital Career Mentor Written Job CV

Learner Job \ Technical Documentà:0



Electrical Engineering Didactic Material
for Learner



department
Higher
Education and Training
REPUBLIC OF SOUTH AFRICA

Weighting of Courses Certificate Engineering Studies / National N Diploma Engineering

STUDENT: TSHINGOMBE TSHITADI

Courses in Curriculum

	Census Day Enrolments	Credit value of the course
Industrial electronics N1		
Engineering Drawing N1		
Electrical trade theory n1	0.33	1
Mechanics electronics n1	0.33	1
Electrical electronics N1	0.33	1
Electrical trade theory n1	0.33	1
N2 SCALING PLACINENT	0.33	1
Industrial electronics n3	0.3	1
Engineering science n3	0.3	1
Electro – technology n3	0.3	1
Industrial trade theory n3	0.3	1
Electrotechnics n4	0.33	1
Industrial electronics n4	0.3	1
Engineering science n4	0.3	1
Mathematics n4	0.3	1
ELECTROTECHNIC	0.33	1
MATHEMATIC N5	0.33	1
POWER MACHINE N5	0.33	1
INDUSTRIAL ELECTRONICS N5	0.33	1
ELECTROTECHN	0.33	1
ENGINEERING PHYSIC N6	0	1
INDUSTRIAL ELECTRONICS N5	0.33	1

Table 15. / Weighting of Courses: Certificate Engineering Studies / National N Diploma Engineering

Have any enquiries. Recent applications

Submission No	Name	Date	Status	Electronic Certificate	Document(s)
202207095055	Tshitadi Tshingombe	2024-02-12 11:38	Submitted	Relevant	NCM and NATET Combination / or Paace College
	Fiston Ishingombe	2025-08-03 09:56	Pending		
202202115021	Tshitadi Fiston Tshingombe	2025-09-11 13:45	Pending		
202207125014	Tshitadi Ishingombe	2023-01-16 13:31	Pending		

DHET Weighting of Courses

Certificate

Engineering Studies / N Diploma Engineering

STUDENT NAME: TSHINGOMBE TSHITADI

Course in curriculum

Industriel electronics n1
 Electronical trade theory³
 Engineering science n3
 Electro-technology n3
 -industrial orientation nn3
 -plant operation theory n3
 -electro-technology n3
 -electrical trade theory n3
 N2 SCALING PLACEMENT
 Industriel electronics n4
 Industrial electronics n⁴
 Engineering science n⁴ ^ 4
 Mathematics n⁵
 Electrotechnic n5
 Mathematic n5
 Power machine n5
 Industrial electronics n5
 Electrotechnic
 Engineering physic n6
 Industrial electronics n6
 Mathematic

Certificate Courses in Curriculum	Census day enrolments	Credit value of course	FTE student
Industriel electronics n1	1	0.33	1
Engineering drawing n1	1	0.33	1
Electrical trade theory n1	1	0.33	1
Mathematics n1	1	0.33	1
N2 Scaling Placement	1	0.33	1
Industriel electronics n4	0.33	0.33	1
Engineering science n4			
Mathematic n4	0.33	0.33	1
Electrotechnic n6	0.33	0.33	1
Engineering physic n6	0.33	2.31	7
Mathematic	7	2.31	7
Total	7		7



DHET

Weighting of Courses

Certificate Engineering Studies / N diploma Engineering

STUDENT: TSHINGOMBE TSHITADI

Courses in Curriculum

Master and Doctoral	Census Day	Credit value
Industrial electronics n1	Enrolments	of the course
Engineering drawing N1	0.33	1
Electrical trade theory n1	0.33	1
Mathematics n1	0.33	1
N2 SCALING PLCEMENT	0.33	1
Industriel electronics n3	0.33	1
Electrenical trade theory n3	0.3	1
Enginerig science n3	0.3	1
-Industrial orientation n3	0.3	1
-plant operation theory n3	0.3	1
Electro-technology n3	0.34	1
Industrial Electronics n4	0.33	1
Industrial electronics n4	0.3	1
Mathematic n4	0.33	1
ELECTROTECHNIC MATHEMATIC N5	0.33	1
POWER MACHINE N5	0.33	1
INDUSTRIAL ELECTRONICS N5	0.33	1
MATHEMATIC	0.33	1

Table 15 / Weighting of Courses. Certificate Engineering Studies / National N Dipoloma Engineering

Have any enquiries.

Submission No	Name	Date	Status	Electronic Certificate	Document(s)
202207055055	Tshitadi Tssingombe	2024-02-12 11:36	Submitted		NCV and NATEH
202211165081	fiston fshingombe	2023-03-00.09:36	Pending		Constitution / St Peace College
202309115021	Tshifadi Fiston Tshingo	2023-03-11 13:46	Pending		
202207125014	tshitadi Tssingombe	2023-01-16:13:31	Pending.		

**SAQA
N**
**Diploma
and
Certificate
Award**
DEGREE
Post Graduate
NQF6
**Engineering
Electrical**
**SAQA
NQF7**
**Engineering
Electrical**
**SAQA
NQF8**
**Engineering
Electrical
And Trade
Engineering
N Dioloma
Assessment
and
Moderator**
NQF8
**Education
Technology
and
Engineering
Electrical**

DHET SAQA Discovery Award Prize Novation Career Gold Silver Bronze Platinum Award Badge



TSHINGOMBE TSHITADI

RESEARCH INNOVATION
NATED NCV CURRICULUM
ENGINEERING MODERATORAR
FACILITATOR
PRICE ACHIEVEMENT MERITUS,
CAREER MENTOR
N DIPLOMA DISCOVRY
ELECTRICAL ENGINEERINIG
DIDACTIC MATERIAL
FOR LEARNER FOR LEARNÆER



DHET



DHET

DISCOVERY AWARD
PRIZE NOVIATION CAREER
Award Badge: TSHINGOMBE TSHITADI



Award Badge: TSHINGOMBE TSHITADI
FOR RESEARCH INNOVATION,
NATED NCV CURRICULUM,
ENGINEERING MODERATOR FACILITATOR,
PRICE ACHIEVEMENT MERITUS
CAREER MENTOR N-DIPLOMA DISCOVERY
ELECTRICAL ENGINEERING DIDACTIC
MATERIAL FOR LEARNER'

Table 15/Weighting of Courses: Certificate Engineering Studies / In

GOLD	SILVER	BRONZE
GOLD	PLATINUM	



DHET

DISCOVERY AWARD PRIZE INNOVATION CAREER

TSHINGOMBE TSHITADI



**SAQA N
Diploma
and
Certificate
Award
DEGREE**

**For Research Innovation NATED NCV Curriculum
Engineering Moderator Facilitator Prize
Achievement Meritus Career Mentor N
Diploma Discovery Electrical Engineering Diaa-
tic Material for Learner**

SCiBONO

**journey
expert assessment
library
career mentor**

**WRITEN
JOB CV**

**journey
expert assessment
library
career mentor
Digital material
for learner**

DHET SAQA Discovery Award Prize Novation Career Gold Award Badge



TSHINGOMBE TSHITADI

RESEARCH INNOVATION
NATED NCV CURRICULUM
ENGINEERING MODERATATOR
FACILITATOR
PRICE ACHIEVEMENT MERITUS,
CAREER MENTOR
N DIPLOMA DISCOVERY
ELECTRICAL ENGINEERING DIDACTIC MATERIAL
FOR LEARNER SCI-BON
EXPERT ASSESSMENT LIBRARY CAREER MENTOR
WRITTEN JOB CV LEARNER JOB TECHNICATOL



DHET

DHET

DHET TRANSCRIPT RECORD LEARNER STUDENT

Name: TSHINGOMBE TSHITADI

Assessment Moderator Engineering Student

SAQA ID: SAQA 09121 SAQA INSTITUTE
30:08 NC Assess Policy]6099
SAQA ID: 6700 CERTIFICATE AVANCE PHASE TEACH
N3 SAGA ID:63375 ID:67491 ENTRANCE IN
DIPLOMA



**Qualification Title: NATIONAL N DIPLOMA
ENGINEERING
NQF Level: 6**

**Award Badge: TSHINGOMBE
TSHITADI**

Recent applications: 11/05/2023 - Date Process DHET

Submission No	Name	Date	Status
202207085096	ishitadi ishingembe	2024-02-12 11:56	Submitted
202211155081	liston ishingembe	2023-09-03 08:59	Pending
202803115021	isntad liston Tshingembas	2023-03-11 19:45	Pending
202207125014	ishitadi ishingembe	2023-01-16 19:31	Pending

TimeTab:
ID/501110002
N1: ENGINEERING STUDIE
ID:2004007084381
ID:2100002023812

Criticon 4.1

ICASS Trimester Mark

4.1.1 Two formal class tests for full time and part time students (or Two assignments for distance learning students only)

4.4 Weight value of modules

- 1.Safety precautions
- 2.Fire and Fire fighting
- 3 Hand ad power tools
- 4.Direct Current theory
- 5 Korductors and insulating

Submitted to DHET: 11/05/2023 - Date Process
Submitted to DHET: 11/05/2023 **ENGINEERING STUDIE**
ID: 2004007064381 **PEACE COLLEGE**

4.2 Examina

- 4.2.1 The examination shall consist of 100 % of the syllabus
- 4.2.2 Duration shall be 3 hours
- 4.2.3 Minimum pass percentage shall be 18 %
- 4.2.4 Closed book examination. application and evaluation are important aspects of the subject and should be weighted as follows;

Knowledge	Understanding	Evaluation
60%	20%	15%

Qualification Title: NATIONAL N DIPLOMA ENGINEERING
NQF Level: 6
Electrical Trade Theory N1

DHET SAQA

Transcript Record

LEARNER / STUDENT

TSHINGOMBE TSHITADI

Assessment Moderator

Engineering Student Subject

SAQA ID 67Q0 Certificate Advance Phase Teach N ON D1
 SAQA ID 63375JD 67491 Entrance N Diplomat-N Diploma
 Qualification Title NQF Level:6 SUBMITTED
NATIONAL N DIPLOM ENGINEERING 202207085055
 Date Submitted To DHET: Tshitadi Tshingombe
 N1 Engineering Studies 2024-02-12.11:36
 ID Timetable / /501110002
 N1:Engineering Studies ID204002t

Submitted	Status
202207085055 Tshafitdi T:hingombe	2024-02-12 11:36
202111166081 fiston tshingombe	2023-06-03 09:56
202303115021 Tshafitdi	2023-03-11 13:45
Tshingombe Thstiadi	

4, 1 ICASS Trimester Mark

4.1.1 Two formal class tests for full time and part time students
 (or Two assignments for distance learning students only)
 4.1.2 Obtain minimum of 40% in order to qualify to write the final!

4.2 Examination

4.2.1 The examination shall be consist of 100 % of the of the syllabus
 4.2.2 Duration shall be 3 hours lof 40%
 4.2.4 Closed book examination

4. Examination

4.2.1 The examination shall consist of 100 % of the syllabus
 4.2.2 Duration
 4.2.3 3 hours
 4.2.3 Minimum pass percentage shall be 40%

4.3 Promotion Mark

The promotion mark, consisting of the combination of the Trimester and Examination marks, shall be a minimum of 40%

DHET

DHET TRANSCRIPT RECORD LEARNER STUDENT

Name: TSHINGOMBE TSHITADI

Assessment Moderator Engineering Student

SAQA ID: SAQA 09121 SAQA INSTITUT:
30:08 NC Assess Policy]6099
SAQA ID: 6700 CERTIFICATE AVANCE PHASE TEACH
N3 SAGA ID:63375 ID:67491 ENTRANCEIN
DIPLOMA



**Qualification Title: NATIONAL N DIPLOMAT
ENGINEERING
NQF Level: 6**

**Award Badge: TSHINGGOMBE
TSHITADI**

Recent applications: 11/05/2023 - Date Process DHET

Submission No	Name	Date	Status
202207085096	ishitadi ishingembe	2024-02-12 11:56	Submitted
202211155081	liston ishingembe	2023-09-03 08:59	Pending
202803115021	isntad liston Tshingembas	2023-03-11 19:45	Pending
202207125014	ishitadi ishingembe	2023-01-16 19:31	Pending

TimeTab:
ID/501110002
N1: ENGINEERING STUDIE
ID:2004007084381
ID:2100002023812

Criticon 4.1

ICASS Trimester Mark

4.1.1 Two formal
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time and part time
students (or Two
assignments for
distance learning
students only)

4.4 Weight value of modules

- 1.Safety precautions
- 2.Fire and Fire fighting
- 3 Hand ad power tools
- 4.Direct Current
theory
- 5 Korductors and
insulating

Submitted to DHET: 11/05/2023 - Date Process
Submitted to DHET: 11/05/2023 **ENGINEERING STUDIE**
ID: 2004007064381 **PEACE COLLEGET**

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- 4.2.2 Duration shall be 3 hours
- 4.2.3 Minimum pass percentage shall be 18 %
- 4.2.4 Closed book examination. application and
evaluation are important aspects of the
subject and should be weighted as follows;

Knowledge	Understanding	Evaluation
60%	20%	15%

Qualification Title: NATIONAL N DIPLOMAT ENGINEERING
NQF Level: 6
Electrical Trade Theory N1

DHET SAQA

Transcript Record

LEARNER / STUDENT

TSHINGOMBE TSHITADI

Assessment Moderator

Engineering Student Subject

SAQA ID 67Q0 Certificate Advance Phase Teach N ON D1
 SAQA ID 63375JD 67491 Entrance N Diplomat-N Diploma
 Qualification Title NQF Level:6 SUBMITTED
NATIONAL N DIPLOM ENGINEERING 202207085055
 Date Submitted To DHET: Tshitadi Tshingombe
 N1 Engineering Studies 2024-02-12.11:36
 ID Timetable / /501110002
 N1:Engineering Studies ID204002t

Submitted	Status
202207085055 Tshafitdi T:hingombe	2024-02-12 11:36
202111166081 fiston tshingombe	2023-06-03 09:56
202303115021 Tshafitdi	2023-03-11 13:45

Tshingombe Thstiadi

4, 1 ICASS Trimester Mark

4.1.1 Two formal class tests for full time and part time students
 (or Two assignments for distance learning students only)
 4.1.2 Obtain minimum of 40% in order to qualify to write the final!

4.2 Examination

4.2.1 The examination shall be consist of 100 % of the of the syllabus
 4.2.2 Duration shall be 3 hours lof 40%
 4.2.4 Closed book examination

4. Examination

4.2.1 The examination shall consisting of 100 % of the syllabus
 4.2.2 Duration
 4.2.3 3 hours
 4.2.3 Minimum pass percentage shall be 40%

4.3 Promotion Mark

The promotion mark. consisting of the combination of the Trimester and Examination marks, shall be a minimum of 40%

COUNCIL EDUCATION CERTIFICATE

This certifies that

**TSHINGOMBE
TSHITADI**



This certifies that

TSHINGOMBE TSHITADI

Job Reference: 50813499NLee

Position: Snr Technician Clvil Eneineering and Snr Tech Electrical
Applications PTMC or Substations Tx Engineering Germiston x15
Region: South Africa (Gauteng)

Industry: Engineering

Closing Date: 2023 / 12/22

Thank you for your interest in a career at Eskom. Your online application was received and will be duly actioned by the Recruitment Practitioner allocated to the position you applied for.

Should you not be contacted within 28 days of losing date of this advertisement, please accept that your application was unsuccessful

Please also note that you only have to register and load your Personal History Profile (PHP) once. You may in future apply for vacancies using the PHP provided. Once the PHP has been completed for a particular vacancy, it can be saved and used for future applications. The PHP may be up dated, when necessary, for future applications

Best wishes with you future

Kind Regards

Recruitment Manager

Shared Services (HR)

FINANCE DIVISION

Disclaimer

NB: This Email and its contents are s. subject to the Tskom Holdings SOC Ltd EMAIL LEGAL NOTICE which can be viewed at [https //www.eskom.co.za /about-eskom/em-illegal-sprd/aclaimer/](https://www.eskom.co.za/about-eskom/em-illegal-sprd/aclaimer/)

sharepoint@eskom.co.za Dec 10, 2023, 1:01 PM to me

Dear Tshingombe.Tshitadi ,

Job Reference: 50816031Nles Positon: Senior Technician Substation Automation
Integration PTMC in Engineering Simmerpan Simmerpan Germiston x8

sharepoint@eskom.co.za Dec 10, 2023, 1:02 PM to me

Job Reference: Qx Arn NN 08/12/25 (1) Positlon: Officer Education art by
Training (Water Education and Tmaining Water Pla

Region. South Africa (Mpumatanga)

Industry: Human Resources

sharepoint@eskom.co.za Dec 10, 2023, 1:03 PM to sharepoint



CERTIFICATE OF APPRECIATION

Proudly presented to

**TSHINGOMBE
TSHITADI**



SIGNATURE



Status

CERTIFICATE AWARD TRANSCRIPT

This certifies that

**TSHINGOMBE
TSHITADI**



PROCEEDINGS.

- Including unfair dismissal claims, arbitration outcomes, and transcript certification.

PSIRA complaint records:

TSHINGOMBEKB TSFIADI <tshingombekb@gmail

LABOUR

SPECIAL COMPLAINT FORM-PRIVATE SECURITY SECTOR PROVIDENT FUNI

Dear valued employer,

TSHINGOMBE CCMA

1. Kindly be reminded that you have not met your statutory obligation to remit all levy contributions inclusive your portion and that of the employees in your employ, to the Council's registered bank account. The said payments were due on the 10th day of the month, in terms of clause 6.2 of the Levies Collective Agreement, Gazette No 42975 of 29 January 2020.
2. To avoid further accumulation of interest calculated in terms of Clause 7 (7.1) (ii) of the Levies Collective Agreement and the Prescribed Rate of Interest Act 55 of 1975, please transmit your levies urgently.

Tshingombe Tshitadi

SPECIAL COMPLAINT FORM - PRIVATE SECURITY SECTOR PROVIDENT FUND

Dear valued employer,

1. Kindly be reminded that you have not met statutory obligation to remit all levy contributions inclusive your portion and that of the employees in your employ, to the Council's registered bank account. The said payments were due on or the 10th day of the month, in terms of clause 6.2 of the Levies Collective Agreement, Gazette No.42975 of 29 January 2020.
2. To avoid further accumulation of interest calculated in terms of Clause 7(7.1) (ii) of the Levies Collective Agreement and the Prescribed Rate of Interest Act 55 of 1975, please transmit your levies
3. Furthermore, kindly note that the Council will not issue a letter of good standing to any employer who has failed to fulfil this obligation and/or has outstanding levy





Microsoft



CERTIFICATE AND ASSESSMENT TRANSCRIPT

This certifies that

TSHINGOMBE TSHITADI

-
- CCMA and Labour Court proceedings: Including unfair dismissal claims, arbitration outcomes, and transcript certification.
 - PSIRA complaint records: Filed against a security employer, with supporting evidence and contact details.





CERTIFICATE

Tshingombe Tshitadi

46307664@gmail.com

GitHub Copilot Tools Achievements



Implement Code Improvements using GitHubCopilot tools Completed on 10/4/2025



Develop unit tests using GitHub Copilot tools Completed on 10/4/2025



Generate Documentation Using GitHubCopilot Completed on 10/4/2025



Develop code features using GitHubCpilot tools Completed on 10/4/2025



Get started with GitHub Copilot Completed on 10/4/2025

Module Assessments



Write your first C# code Completed on 8/28/2025



Introduction to GitHub administration Completed on 8/28/2025

Completed Microsoft Training Courses

- Plan and prepare to develop AI solutions on Azure
- Develop an AI App with the Azure Ai Foundry SDK
- Explore AI for Ail
- Boost your productivity with Microsoft Copilot
- Get started with Microsoft Copilot
- Explore responsible AI



Achievement Certificate

Awarded to

Tshingombe Tshitadi

For completing

Assessment: Microsoft

On this day, 9 April 2021

A stylized, handwritten signature in black ink, positioned above the word "Educator".

Educator

Challenges

Credentials

Q&A

Achievements

Collections

Transcript

Transcript Records may take up to 24 hours to update.

Transcript

Legal name: **Tshingombe Tshitadi Fiston**

46307064 Edit display name in settings

Username: **tshingomberiston@gmailmail.com**

Contact email: Edit contact email in settings

Modules completed 943

Learning path-title	Description	Completed on	All module completed
APL 2007; Aceetremc ap development by using GitHub Copilot.	Learn how to accenottract app developitt tio Hoking GitHub-Copilot and GitHub Coplor Smal in a Visual Studio-Code environment.	Oct 4, 2025.	N/A N/A
AI Fluency	This learning path is designed to provide a compiemerative understanding in AI Enency it includes modules that navanous aspects of AL starting with foundational contconny and progressing to mast addi-executtores. Each module	Aug 28, 2025	N/A N/A
Build custom agents for Microsoft Teams	Build custom agents for your Microsoft Teame phat one-text your businesss needs.	Nov 16, 2024	N/A N/A

Modules completed

Moliles title	Description	Completed on	Duration	Module assessment
Implement code enprovements. using GitHub-Copilor cools	YNC module explores using GitHubor Coplot. Char to develop improvements for an tax-sting costebese. Exercises provide practical	Oct 4, 2025	1 hr 20 mir	Take module assessment
Develop unit-tests using GitHub-Conlilor cools	Development code improvements using. GitHub Copolot cooin to develon respoese	Oct 4, 2025	1 hr 7 min	Take module assessment

Transcript

Records may take up to 24 hours to update.

Legal name:
Tshingombe Tshitadi Fiston

Learning paths completed
943

Completed on
756 hr 38 min

46907084 [Edit displaynam in settings](#)
Username: 46507994 [Edil username In settings](#)
Contact email : tshingombefiston@gmail.com

Learning paths completed
216

Modules completed		Completed on	Completed on	All module assessment results
Learning path title	Description	Completed on		
APL-2007; Accelerate app development by using GitHub Copilot	Learn how to acelerwly-letp develop by using GitHub Copliot and GitHub Copllot in a Visual Studio-Code	Oct 4, 2025	Oil v, 2025	N/A
Ai Fluency	This learning path is designed to provide a compreter-lave rendeed og. ding at ficiency it includes moducles that cover various aspects.or. AI, star	Oct 28, 2025	N/A	N/A
Build custom agents for Microsoft Teams	Build custom agents for your Microsoft Teams envioment for your business needs.	Nov 16, 2024	1 hr 20 min	Take module assessment

Modules completed		Completed on	Duration	Module assessment
Module title	Description			
Implement code testing using	This module explores using GitHub ConlioniThm inolearlov totellwinme	Oct 4, 2025	1 hr 20 min	Take module

Transcript

Records may take up to 24 hours to update.

Legal name: **Tshingombe Tshitadi Fiston**

46207064

[Edit display name](#) in [settings](#)

[Edit display name in settings](#)

Username: 46307064 [Edit user name](#)

Contact email: tshingombefist@gmail.com

Modules completed **943**

Learning paths completed **216**

Training hours completed **756 hr 38min**

Learning paths completed

Learning path title	Description	Completed on	All module assessment results
APL 2007: Accelerate app development by using Gith...	Learn how to accelerate app development by using GitHub Copilot and GitHub	Oct 4, 2025	N/A
AI Fluency	Build custom agents for sam	Aug 28, 2025	N/A
Build custom agents for Microsoft Teams	Build custom agents for your Microsoft Teams environment	Nov 16, 2024	N/A

Modules completed

Module title	Description	Completed on	Duration	Module assessment
Implement code improvements using Git...	This module explores using GitHub Copilot chat to develop improvements for an existing	Oct 4, 2025	1 hr 20 min	Take module assessment
Develop unit tests using	Exercises provide practical	Oct 4, 2025	1 hr 7	Take module

CITY POWER

Career Opportunities at City Power

Ready to light up your career?

Ready to light up your career? Whether you are a new artisan or engineer, graduate or experienced professional or we look to attract people who will add value to our business.

We may not always have vacancies open, but when we do, you'll find the information below.

If you meet all the requirements outlined in the job profile and can provide all the relevant documentation to support your application then we invite to apply.

External candidates should:

Step 1: Complete the application form ([Download the Application Form](#)).

Permanent Vacancies

Step 3: Attach all the required documentation

Step 4: Submit application to the email address provided and wait for feedback.

Vacancies

Looking for a career opportunity in City Power! Well, the opportunity within is just a click away. Candidates can now search and apply for jobs



Tshingom

Legal name:
Tshingombe Tsh
46307064

Contact email:
(shingombe@sttc

Modules completed
943

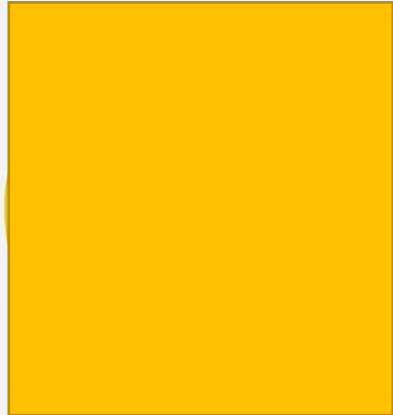
Learning paths completed
216

Training completed
756 hr 38 min

CITY POWER

AWARD PRIZE

DISCOVERY INNOVATION



**Tshingombe
Tshitadi**

Legal name:

**Tshingombe
Tshitadi**

46307064

Contact email:

MY CANDIDATE PROFILE



**Tshingombe
Tshitadi**

*First Name:

*Last Name:

Candidate ID: 294647

*Title:

*Phone:

*Email:



Data Privacy Statement

Dear applicant, your interest in career with us.

In this section, you have the opportunity to add more details to your profile.
The more details you add, the more likely, the job will match your interests.

Please note by creating your profile below, you hereby agree that your data is
available for the recruitment team to view.

The Recruitment Team

Career Opportunities: Jobs Applied

Company		Terms & Conditions		Privacy Policy	
Job Title	Actions	Req ID	Date Applied	Status	Status Date
Analyst: Data & Reporting		7504	10/12/2023	New Application	
Analyst: Planning		9572	29/06/2024	New rejected	Please apply for another
Auditor		7198	11/11/2023	Reject	Opportunity
Auditor Compliance Audit Level 1	1 year, 10 months	Aikt	29/07/2023	We are currently reviewing all	
Tax Auditor Level 3	Reject	9862	28/09/2023	Please apply for another	Please apply for another

My Candidate Profile

Tshingombe Tshitadi

*First Name:

*Last Name:

294647

*Title:

*Phone:

Data Privacy Statement

Dear Applicant:

We appreciate your interest in a career with us.

In this section, you have the opportunity to add more details to your profile. Please note that by creating your profile below, you hereby agree that

your data is available for the recruitment team to view.

The Recruitment Team

[Company](#) | [Terms & Conditions](#) | [Privacy Policy](#)

Tshingombe Tshitadi's CV

Last Updated: 18/10/2023

Tshingombe Tshitadi's Cover Letter

Last Updated: 18/10/2023

Tshingombe Tshitadi's Cover Letter

Last Updated: 18/10/2023

Previous Work History

 Add

Entry 1 of 1

Educational Services

 Remove

Tshingombe

02/20 – 11/21

 Remove

Formal Education

 Add from

 Details

NQF Level 6 (Diploma Advanced Certificate)

Adv Cert. Educ : Technical
Education

 Remove

 Details

Formal Education Add Another

There are no items in this section.

Language Skills Add

There are no items in this section.

Professional Memberships Add

There are no items in this section.

Geo Mobility Add

There are no items in this section.

Career Opportunities: Jobs Applied



SOUTH AFRICAN RESERVE BANK

CERTIFICATE

Graduated

Fiston Tshingombe

tshingombefiston@gmail.com

+27 0725298946

ACTIVE JOB APPLICATIONS

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

**TRANSCRIPT AND RECORD OF CAREER
ENGINEERING CAREER,
ARTISAN ELECTRONICS**

Surname: Tshingombe I.

Occupation:

NQF LEVEL	QUALIFICATION	AWARD DATE	AWARD TYPE
1	Electronics Workshop Assistant	2023/06/20	Part Qualification
2	Electronics Equipment Mechanic	2023/06/20	Part Qualification
3	Computer Equipment Repairer	2023/06/20	Part Qualification
4	Artisan Electronics Technician (Trade)	2023/06/20	Part Qualification



South African Reserve Bank

TRANSCRIPT OF NATIONAL CERTIFICATE ARTISAN - ELECTRONICS

Transmissione

ARTISAN: ELECTRONICS

TSHINHOMBE TSHITADI

This is to confirm that the above-named graduate was awarded a National Certificate of completion for the programme.

QUALIFICATION	YEAR CONFERRED
NATIONAL CERTIFICATE - ARTISAN: ELECTRONICS	2021

Date Issued: 2021-10-12

A stylized, handwritten signature in black ink, likely belonging to the Governor of the South African Reserve Bank.

Governor / Akhen

This document has been issued without alteration or erasure.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

**ENGINEERING CAREER,
ARTISAN ELECTRONICS**

This is to certify that

Tshingombe Tshitadi

ID: 10/11/1982

Was awarded the following Part qualifications
on 20 June 2023:

- Bank Note Machine Artisan Electrical
- Ban Note Machine Artisan Electronics
- Ban Note Machine Artisan Electronics

Awarded: 20 June 2023

Chairperson

Issued by SAQA



SOUTH AFRICAN RESERVE BANK

SARB BANKNOTE ACADEMY

TRANSCRIPT AND RECORD OF CAREER

Surname: Tshitadi

Occupation: Artisan Electronics, Banknote
Machine Artisan Elec

Birth Date: 10 November 1982

NQF LEVEL	QUALIFICATION	AWARD DATE	AWARD TYPE
1	Banknote Technician Assistant	2022/06/20	Part Qualification
2	Banknote Equipment Mechanic	2022/06/20	Part Qualification
3	Banknote Equipment Repairer	2022/06/20	Part Qualification
4	Artisan Electrine Artisan (Trade)	2022/06/20	Part Qualification

**Graduated from SP PEACE COLLEGE,
ENGINEERING ELECTRICAL**



South African Reserve Bank

**TRANSCRIPT AND RECORD OF CAREER
ENGINEERING CAREER, ARTISAN ELECTRICAL**

**Transmissione Tshitadi
BANK NOTE MACHINE ARTISAN ELECTRICAL**

Date of Birth : 10/11/1982

Student Number

This is to certify that the above-named graduate was awarded the qualification stated below at St Peace College of Engineering, Electrical.

QUALIFICATION	YEAR CONFERRED
ARTISAN CERTIFICATE: BANK NOTE MACHINE ARTISAN ELECTRICAL	2021

Date Issued: 2021-10-12

A handwritten signature in black ink, appearing to be 'Akhen', written over a horizontal line.

Governor / Akhen

This document has been issued without alteration or erasure.



South African Revenue Service

TRANSCRIPT AND RECORD OF CAREER ENGINEERING CAREER

Tshingombe Tshitadi

Date of Birth: 10 November 1982

This is to confirm that the above-named graduate completed a programme and was awarded:

QUALIFICATION	AWARD DATE	TYPE
Banknote Technician Assistant	2022/06/20	

Graduated from **SP PEACE COLLEGE,**
ENGINEERING ELECTRICAL

Graduated from 2021-10-12

A handwritten signature in black ink, appearing to read 'Akhen', is written over a horizontal line.

Governor / Akhen



Companies and Intellectual Property Commission
REPUBLIC OF SOUTH AFRICA

CERTIFICATE OF REGISTRATION

This certifies that

Tshingombe Tshitadi

ID: 10/11/1982

Student

Has graduated from St Peace College
in the degree of

ENGINEERING, ELECTRICAL

QUALIFICATION	YEAR CONFERRED
ARTISAN CERTIFICATE: BANK NOTE MACHINE ARTISAN ELECTRICAL	2021

Date: 2020-12-14

Registrar

This document has been issued without alteration or erasure.



dtic

Department:
Trade, Industry and Competition

RECORDS TRANSCRIPT OF REGISTRATION CAREER PORTAL

Student: **Tshingombe Tshitadi**

College: St Peace College

Student: Tshingombe Tshitadi

This is to certify that the above-named graduate was
awarded the qualification stated below at
St Peace College of Engineering, Electrical



Date Issued: 2021-10-12



REG NO-8017 2552 4985 3187

Governor / Akhen

Registered



the dft industrial development
trade investment

DEPARTMENT: TRADE, INDUSTRY AND COMPETITION
REPUBLIC OF SOUTH AFRICA

**TRANSCRIPT AND RECORD OF CAREER
CENTRAL SUPPLIER PORTAL
BID AWARD**

This is to certify that

Tshingombe Tshititadi

BANK NOTE MACHINE ARTISAN ELECTRICAL

ID :

Date of Birth : 10/11/1982



Was Added to the Central Supplier portal,
20 September 2023:

St Peace College of Engineering, Electrical

Date Issued: 2023-09-20

A handwritten signature in black ink, appearing to be 'A. M. M.', written over a horizontal line.

Director-General

This document has been issued without alteration or erasure.

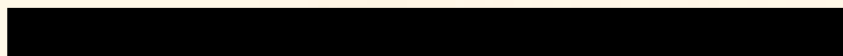


CENTRAL SUPPLIER DATABASE

**THE DEPARTMENT OF TREASURY
TENDERED RECORD**

BID AWARD CERTIFICATE

Tshingombe Tshitadi



Date of Birth: **10 November 1982**

This is to confirm that the above-named graduate was awarded a programme and was awarded:

**ST PEACE COLLEGE
ENGINEERING ELECTRICAL**

Graduated from 2021-10-12


Governor / Akhen



labour

Department of Labour
Department van Arbeid
UMnyango Wezabasebenzi

UIF AND COID RECORD TRANS- SCRIPT OF CERTIFICATE STUDENT REGISTRATION CAREER COMPENSATION AWARD

This is to certify that

Tshingombe Tshitadi



Date of Birth: 10 November 1982

Was registered for the above learning programme
and the Compensation Award was conferred

St PEACE COLLEGE





SARB



DEPARTMENT:
LABOUR

UIF | COID

TRANSCRIPT OF REGISTRATION CAREER PORTAL COMPENSATION AWARD CERTIFICATE

This is to certify that

Tshingombe Tshitadi

Date of Birth: 10 November 1982

Has been awarded by DEPARTMENT of BOUR,
for compensation in the career portal for comple-
tion of studies at **ST PEACE
COLLEGE**

Graduated from 2021-10-12

DIRECTOR GENERAL,
DOL

Graduated from **SP PEACE COLLEGE,**
ENGINEERING ELECTRICAL



Department of home affairs

REPUBLIC OF SOUTH AFRICA

WORK PERMIT

This is to certify that

Tshingombe Tshitadi

ID Number :

Date of Birth: 10 November 1982

Has been granted WORK/STUDY
**VISA, CAREER PORTAL REGISTRATION
CERTIFICATE**

At St Peace College

STUDENT

Graduated from **SP PEACE COLLEGE,**
ENGINEERING ELECTRICAL

Graduated from 2021-10-12

A handwritten signature in black ink, appearing to read 'Akhen'.

Governor / Akhen



**national
treasury**
REPUBLIC
OF SOUTH AFRICA

TREASURY, TENDERED

CERTIFICATE OF REGISTRATION ON CAREER PORTAL

This is to certify that student

Tshingombe Tshitadi

St Peace College

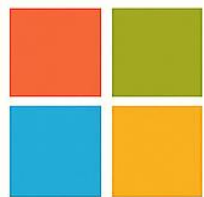
Has been registered successfully as
a supplier on the Central Supplier Database
career portal on 06 February 2024

Graduated from **SP PEACE COLLEGE,**
ENGINEERING ELECTRICAL

Graduated from

A handwritten signature in black ink, appearing to read 'S. Chirani', written over a horizontal line.

Chief Director



Microsoft



Department of home affairs
REPUBLIC OF SOUTH AFRICA

ASSESSMENT CERTIFICATE

This is to certify that

Tshingombe Tshitadi

Student

ID Number: TIRCG00910610

Has been awarded by **DEPARTMENT EIABOUR**,
for compensation in the career portal for
completion of studies at

ST PEACE COLLEGE

Managing Executive



**SOUTH AFRICAN
COUNCIL FOR EDUCATORS**

CERTIFICATE

This is to certify that

Tshingombe Tshitadi

is registered for

Career Development

at St Peace College



Microsoft



labour

Department of
home affairs
REPUBLIC OF SOUTH AFRICA

TRANSCRIPT OF REGISTRATION OF PORTAL BID AWARD CERTIFICATE

This is to certify that

Tshingombe Tshitadi

ID Number: TIRCG000910610

Has Passed the Assessment at St
Peace College

St PEACE COLLEGE



Student

Minister of Home Affairs



COUNCIL ON HIGHER EDUCATION

CERTIFICATE OF RECORD

This is to certify that

Tshingombe Tshitadi

was registered in Career Development at
St Peace College

ID Number: TIRCG00091061010

**SOUTH AFRICAN COUNCIL
FOR EDUCATORS**



ECSA PORTAL CERTIFICATE

This is to certify that

Tshingombe Tshitadi

was registered in Career
Development at St
Peace College

ID Number: TIRCG00091061010

**SOUTH AFRICAN COUNCIL
FOR EDUCATORS**

[Find a Registered Person](#)

[MarketPlace](#)

[Search Site](#)



ECSA Self Service Portal



ECSA PORTAL CERTIFICATE

This is to certify that

Tshingombe Tshitadi

was registered in CPD
at St Peace College

ID Number: TIRCG00091061010

**SOUTH AFRICAN COUNCIL
FOR EDUCATORS**

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PSIRA
Private Security Industry
Regulatory Authority

sasseta

ASSESSOR AND MODERATOR CERTIFICATE

This is to certify that

Tshingombe Tshitadi

at St Peace College

ID Number: TIRCG00091061010

**ASSESSOR AND MODERATOR
CERTIFICATE**

Closing

- Supply
Product
2 Dec 2
- Volunt
Senior
14 Jan
- Transf
31 Dec
- Infrast
Engine
31 Dec
- Comm
Superv
9 Dec 2
- RaSP S
Operat
(SC) EXT



PSIRA

PRIVATE SECURITY INDUSTRY
REGULATORY AUTHORITY

**SASSETA ASSESSOR
MODERATOR
CERTIFICATE**

Awarded to

Tshingombe Tshitadi

at St Peace College

ID Number: TIRCG00091061010

PRIVATE SECURITY INDUSTRY
REGULATORY AUTHORITY

METROPOLITAN

POLICE SERVICE

Certificate Transcript Record | IP LICENSE CAREER PORTAL

Applications

LFR Engineering Supervisor	Review Status	View Application
Infrastructure/DevOps Engineer	View Application	View Application
Leading Engineer - Specialist Search	View Adiration	View Application
Technical Services	Review Status	View Application

The Certificate Record

Learner:

Tshingombe Tshitadi

PSIRA SASSETA Assessor Moderator | Private Security Industry
Safety Engineering | LMS

Certificate Name: **tshingombe Tshitadi**
at St Peace College

POLICE SERVICE



Metropolitan Police Service

CERTIFICATE TRANSCRIPT RECORD

Learner: Name

Tshingombe Tshithitadi

Private Security Industrial PIRIIA
SASSETA Assessor Moderator,
Safety Engineering, LMS

Certificate Name: Tshingombe Tshitadi
at St Peace College

Applications:

Applications

Review Status

View Communications

View Application

View

Applications

LFR Engineering Supervisor

Review Status

Infrastructure/DevOps Engineer

View
Communications

Leading Engineer - Specialist
Search Technical Services

View
Communications



BlockMark REGISTER

CERTIFICATE TRANSCRIPT RECORD

Learner: Name

Tshingombe Tshititadi

(DjoFis)

Private Security Industrial PIIIIA
SASSETA Assessor Moderator,
Safety Engineering, LMS

Certificate Name: Tshingombe Tshitadi
at St Peace College



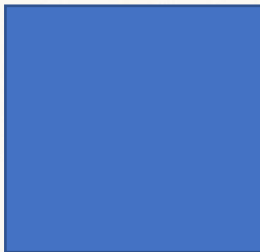
**Tshingombe Tshithitadi
Fiston**

(DjoFis)

BlockMark ID: 1f227088-3b1b409c-
88c9-87fa715ff7b4

Personal account with certificates

Viewable certificates awarded to this person:



tshingombe tshitadi fiston

(djofis)



info

tshingombe tshitadi fiston's profile picture

BlockMark ID: 1f227088-3b1b-4093-88c9-97fa715ff7b4

Personal account with certificates

Metropolitan Police Service certificate transcript record
ip license career portal

Applications: Made

LFR Engineering Supervisor	Review Status	View Application
Infrastructure/DevOps Engineer	View Application	View Application
Leading Engineer - Specialist Search	Review Status	View Application
Technical Services	Review Status	View Application

the certificate record

learner: name **tshingombe tshitadi**

private security industrial PSIRA SASSETA assess moderator,
safety engineering | LMS

Certificate name: **tshingombe tshitadi** at St Peace
College



**Tshigombe Tshitadi
Fiston (Djfis)**

BlockMark ID:

1f2270888-3blb-409r-38c-99cf 
97ta715ff7fFi4

MODERATOR

ASSESSOR

CAREER

MET METRCPOLITAN



Good morning, tshingombe!

Mountaineer

Progress: 5 of 12.



Vieweable

Expeditioner

You have 21,600 points

Earn 13,400 more points
to reach Expeditioner rank.

LMS St Peace College Academic

Transcript Record



BlockMark ID
Transcript Record

Transcript record

Moderator

Assessor



**Tshingombe
Tshitadi Fiston
(Djofis)**

BlockMark ID:
1f227088-3bib-4093-
88c9-97f.a715fffb4

Personal account
with certificates



Good morning,
tshingombe!



**Mountaineer Progress: 5 of 12
Expeditioner**

You have 21,600 points
Earn 13,400 more points to reach
Expeditioner rank.



LMS ST Peace College Academic

46307064

tshingomberfiston@gmail.com

**Badges
948**

**Trophies
216**

**Reputation
points
0**

**Following
0**

t user

S

image

ngombe

tadi fiston



Tshingombe tshitadi Fiston

(djofis)

BlockMark ID: 1f227088-3b1b-4093-88ce97fa715

Personal account with certificates

Viewable certificates awarded to this person:

- [Metropolitan Police Service certificate](#)
- [Transcript](#)
- [Record IP License](#)
- [Career portal](#)

Applications:

LFR Engineerring Supervisor	Review Status
Infrastructure/DevOps	View Comunications
Engineer	View Application
Leading Engineer - Specialist	View Application
Search Technical Services	Job Advert

LEARNER

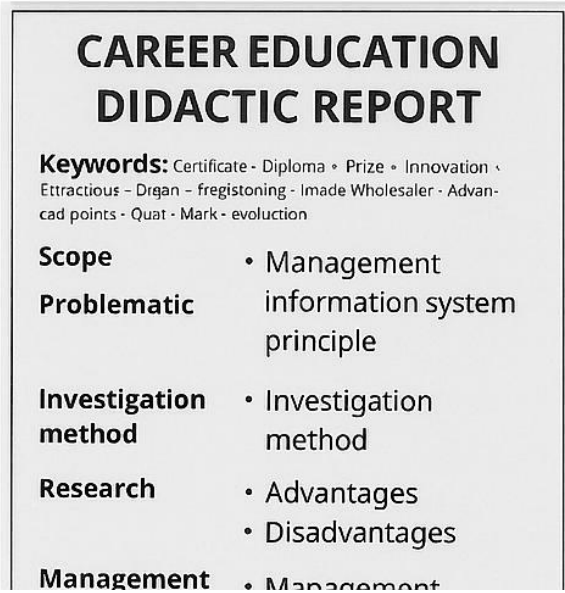
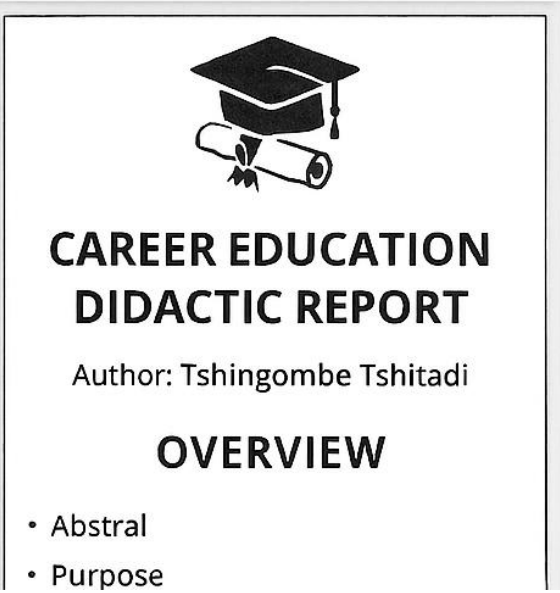
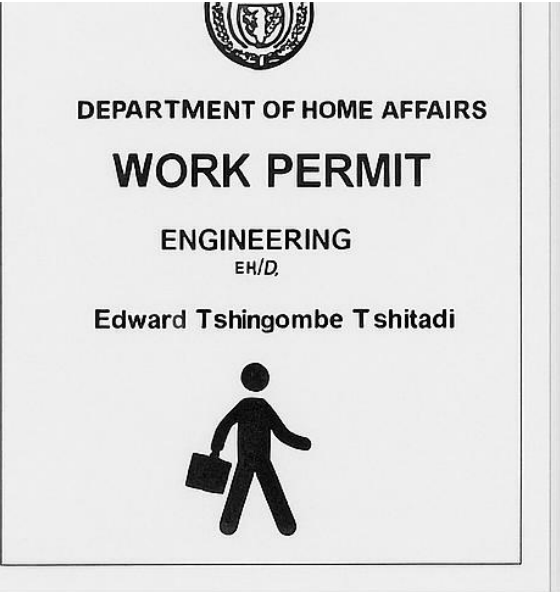
tshingombe tshitadi

SASSETA ASSESSMENT
POLICE

at St Peace College

CERTIFICATE

at St Peace College





Microsoft Company

LICENSE CERTIFICATE

This is to certify that

Tshingombe Tshitadi

Product Issued:

Software, Hardware





Microsoft

LICENSE CERTIFICATE OF AWARD ENGINEERING Tshingombe Tshitadi

**Product Issue
HARDWARE • SOFTWARE • NETWORK**



GitHub



Azure

Career Portal • St Peace College



LICENSE CERTIFICATE

Engineering is awarded to

Tshingombe Tshitadi

Product Issued:

Github, Azure, Hardware, Software, Network



Career portal: St Peace College



Microsoft Company

REGISTRATION

This is to certify that

Tshingombe Tshitadi

Product Issue:

HARDWARE • SOFTWARE • NETWORK



Microsoft

LICENSE CERTIFICATE

OF AWARD ENGINEERING

Tshingombe Tshitadi

Product Issue:

HARDWARE • SOFTWARE • NETWORK



GitHub



Azure

Career Portal • St Peace College

Life Is On

Schneider
Electric

LICENSE CERTIFICATE OF AWARD ENGINEERING

Tshingombe Tshitadi

Product Issue:

HARDWARE • SOFTWARE • NETWORK



GitHub



Azure

Schneider
Electric

Electric®

LICENSE CERTIFICATE

OF AWARD ENGINEERING

Tshingombe Tshitadi

HARDWARE • SOFTWARE ENGINEERING
ELECTRICAL

Career Portal • St Peace College



Microsoft Company

SARS Reg. CARB Reg.

**DTIC Reg. LABOUR UIF
COLD Reg. Reg.**

DHET CDS

Schneider
Electric

LICENSE CERTIFICATE

Engineering is awarded to

Tshingombe Tshitadi

Product Issued:

**Github, Azure, Hardware, Software, Network
Hardware Software Engineering Electrical**



GitHub

 Azure

Career portal: St Peace College

Certificate of Project

AWARDED TO

Tshingombe Tshitadi

For: Issue Term – Private and Public Regulator Policy
Domain: Safety & Security

This certificate attests that the bearer is responsible for the project and commitments in private and public regulation, safety, and compliance.

ISSUE DATE: 04/12/2025

Regulatory Authority

Project: Issue Term – Private & Public
Regulator Policy – Safety and Compliance

Certificate of Project

AWARDED TO

Tshingombe Tshitadi

For: Issue Term – Private and Public Regulator Policy
Domain: Safety & Security

This certificate attests that the bearer is responsible for the project and commitments in private and public regulation, safety, and compliance.

ISSUE DATE: 04/12/2025

Regulatory Authority

Project: Issue Term – Private & Public
Regulator Policy – Safety and Compliance

CERTIFICATE OF LICENSE

Issued To

Rnf Tshingombe Tshitadi

Application Support Input Reports

Instructions

After receiving a notification to provide feedback on a submission, should a report not be available, please check with the following with the applicant:

- Whether they have deleted the record from their application.
- Which role they have assigned to you. Should this have been the Reference⁹ role; they will need to update the role in their application in order for a report to become available.



Original	Date	Action	Date	Complete
Institution Grants				
SHD Self-censor				
RCDS-261115078403	DVC RAD		10/11/2025	Completed
Non-Funding Opportunities				
PCDS-26111556321	Hest of Research		11/04/2025	Completed
NRF Postgraduate Scholarships				
PCDS-315115554052	Heaps fresined Diamdlat-Tokipoli		11/04/2025	Completed
Postdoctoral Grants				
PCDS-28411556631	Hest of Research		11/04/2025	Completed

Issued by: NRF CONNECT

12 APRIL 2025



0009-0005-2690-9559

Home

Profile

GRANTS

Grant Management

MY APPLICATIONS

Applications

REPORTS

Feedback on Submission

Assessment of Application

Application Support Input Reports

Instructions

After receiving a notification to provide feedback on a submission, should a report not be available, please check with the following with the applicant:

- Whether they have deleted the record from their application.
- Which role they have assigned to you. Should this have been the "Reference" role, they will need to update the role in their application in order for a report to become available.

List of Applications

Category



Institutional Grants

Reference	Role	Applied Date	Complete
RCDS251113379483	DVC/HoD	13/11/2025	✓



Powering Business Worldwide

ELECTRICAL ENGINEERING TRAINING TRANSCRIPT

TSHINGOMBE TSHITADI

Username: tshingombefiston@gmail.com

Primary domain: Global SCM

Primary organiza-

Primary job: tshingombefiston

ACTIVITIES

Activity	Status	Start Date	Star Date	Completion	Learner Signature	Compe,
e-Learning Course: Microgrid Modeling and Analysis	Attended	3/5/2025	3/5/2025	20(s): 0. Minute): 0. Seconds; 40	Attended	
e-Learning Course: Eaton: Supporting Your CDP Disclosure	Attended	2/23/2025	2/23/2025		Attended	55
e-Learning Course: Eaton's Low-Voltage Switchgear	Attended	2/22/2025	2/22/2025	Day(s): 0. Minute): 0. Seconds; 3	Failed	55.55
e-Learning Course: Eaton Electrical-- SEM + Addendum	Attended	2/22/2025	2/22/2025	Day(s): 0. Minute): 0. Seconds; 23	Failed	55.55
e-Learning Course: Sales Training Exam: Eaton G4 Rack PDUs	Failed	2/22/2024	2/22/2025	Day(s): 0. Minute): 0. Seconds; 59.2	Failed	55.55
e-Learning Course: Sales Training Exam: Eaton G4 Rack PDUs and Consciving	Failed	1/22/2024	2/22/2025	Day(s): 0. Minute): 0. Seconds; 42.5	Failed	55.55
e-Learning Course: Surge Solutions	Failed	10/27/2024	2/22/2025	Day(s): 0. Minute); 0	Failed	25
e-Power press Training Module 1 - PPE & Housekeeping	Attended	10/27/2024	2/22/2025	10(sg)/204 Attended	Attended	80
e-Learning Course: Functional Skills Workie: Human Resources [eLearning]	Attended	2/21/2025	2/21/2025	Project: Issue Term-- Private. & Public Regulator Policy		5 Serious

EATON PROJECT



TRAINING TRANSCRIPT FOR TSHINGOMBE TSHITADI

List of completed activities from 3/10/2024 to 3/10/2025

Username: tshingombefiston@gmail.com

E-mail: Global 5CM

Primary organization: tshingombefiston@gmail.com

Primary job: User number.

ACTIVITIES

ACTIVITY SIGNATURE	STATUS	START DATE	START DATE COMPLETION DATE	SCORE ATTENDED	BLUSTM/ STATUS
e-Learning Course: Micribalisi Modeling and Mmrete.	Attended	3/10/2024 3/10/2024	3/5/2025 3/3/2025	55 35 Failed	Failed
e-Learning Course: Ester: Regts-vring Your CDP Diachoare.	Attended	3/22/2025 3/22/2025	2/22/2025 3/22/2025	16 67 Failed	Failed
e-Learning Course: Havber Use Voltage. Sattohgalier	Attended	2/22/2025 2/22/2025	3/22/2025 2/22/2025	55-35 Failed	Failed
e-Learning Course: Esterr: Bourrboh. SIEM Addquation	Attended	2/22/2025 2/22/2025	3/22/2025 2/22/2025	80 Failed	Failed
e-Learning Course: Ester: Esterr-s-Esterr. Ester: Httt Back.	Functional Skills Murishop- Nume Recessess [sconsing]	10/27/2024 10/2/12024	Surgieess 2/22/2024	35 Failed	Failed
e-Learning Course: Power Ester: Traking. Medicel 3: EIP0™ :: Elorsilredgring	Attended	2/21/2024 10/21/2024	10/27/2024 10/27/2024	35 Failed	Failed
e-Learning Course: Power Ester: Training Mrtt	Attended	10/27/2024 10/27/2024	10/27/2024 10/27/2024		

Issued by: NRF CONNECT

12 APRIL 2025

CERTIFICATE OF LICENSE

Issued to

Tshingombe Tshitadi

Application Support Input Reports

Instructions

After receiving a notification to provide feedback on a submission, should a report not be available, please check with the following with the applicant;

Application Support Input Reports							
    	Awaren						
	Alrbady In	Solus	Status	Start Date	Completion	Date	Ulistus
	Awanded	E-Learning Course: Microgreda Modeling		3/5/2025	3/5/2025	Day(z)	Complient
	Attended	E-Learning Course: Eupporting Your CDP		2/22/2025	2/22/2025	Day(e)	Attended
	Attended	Disclosure Swibingwear		2/22/2025	2/22/2025	Day(z)	Attended
	Attended	e-Learning Course: Eaton ~ SEM		2/22/2025	2/22/2025	Day(e) Pay(e)	Falhed

Authorised by

CERTIFY FOR YOUR SYSTEMS

12 APRIL 2025

Docket **DHET**

DOCKET NUMBER
:2023/1226



Issue

TSHINGOMBE TSHITADI

FOR
COMPLETION OF THE AWARD SUBJECT
GENERATION
TRANSMISSION
SUBSTATION
CUSTOMER POWER METER



Eskom



Powering Business Worldwide

DHET

CERTIFIED
CONTRACTOR

Docket Number 2023/2226

INFORMATION MANAGEMENT STUURB

- INSTITUTE COLLEGE NAME:ST PEACE

COLLEGE

COUNCIL ENGINEERING ELECTRICCAL PROJECT

AWARD PRESENTED TO

Tshingombe Tshitadi

FOR:

Generation, Transmission,
Substation, Customer Power Meter



ACTIVITIS

BY CEETH OREGON



LICENSE CERTIFICATE

AWARDED TO

TSHINGOMBE FISTON

FOR COMPLETED TRAINING ON

**GENERATION, TRANSMISSION,
AND SUBSTATION
CUSTOMER POWER METERS**

Date 9/20/2024

Signature

ELearning
Course:

**GENERATION, TRANSMISSION, AND
SUBSTATION CUSTOMER POWER METERS**

≡ NRF Connect



National
Research
Foundation

ID 0009-0005-2690-9559

Home

Profile

GRANTS

Grant Management

MY APPLICATIONS

Applications

REPORTS

Feedback on Submission

Account of Application

Non-funding Opportunities

Reference	Role	Applied Date	Complete
NONF250411310281	Host of Research	11/04/2025	✓

NRF Postgraduate Scholarships

Reference	Role	Applied Date	Complete
PMDS250721346062	Master/Doctoral Supervisor Extension Support	21/07/2025	✓

Postdoctoral Grants

Reference	Role	Applied Date	Complete
PSTD250411310291	Host of Research	11/04/2025	✓

2 of 3

12/4/2025, 9:28 AM

236 | Page

of 3

12/4/2025, 9:28 AM

TRAINING TRANSCRIPT FOR TSHINGOMBE TSHITADI

List of completed activities from 3/10/2024 to 3/10/2025

Username:

tshingombefiston@gmail.com

E-mail:

TSHINGOMBEFISTON@GMAIL.COM

Primary domain:

Global SCM

Primary organization:

Primary job:

User number:

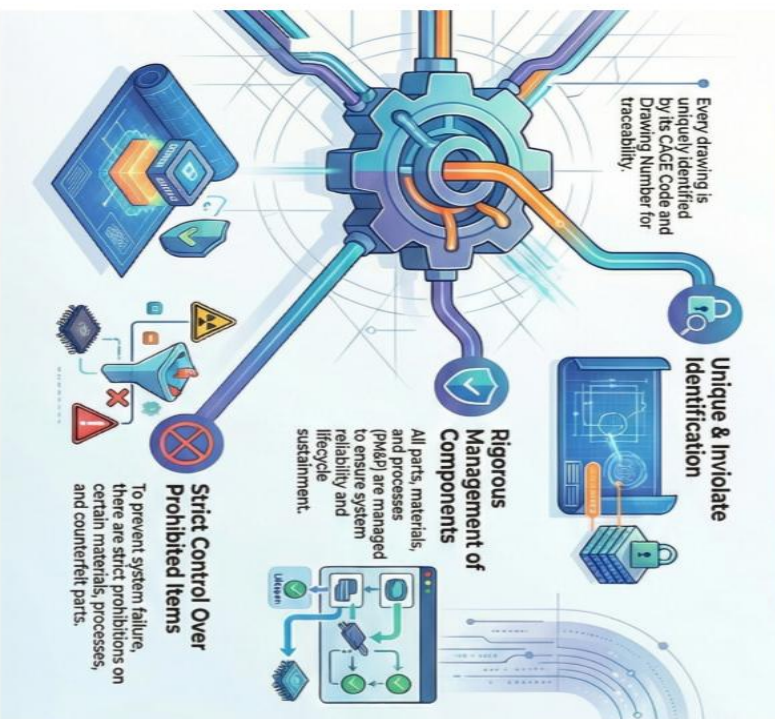
tshingombefiston@gmail.com

ACTIVITIES

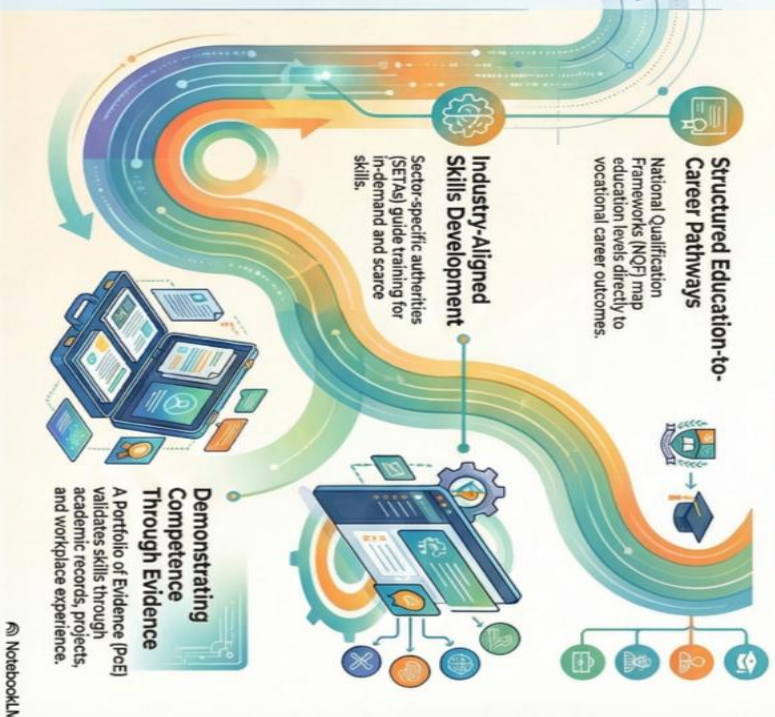
Activity	Signature Status	Start Date	Completion Date ▾	Learner Signature Date	Score	Attended Duration	Completion Status
 e-Learning Course: Microgrid Modeling and Analysis		3/5/2025	3/5/2025			Day(s): 0, Hour(s): 0, Minute(s): 1, Second(s): 40	Attended
 e-Learning Course: Eaton: Supporting Your CDP Disclosure		2/23/2025	2/23/2025			Day(s): 0, Hour(s): 0, Minute(s): 0, Second(s): 53	Attended
 e-Learning Course: Eaton's Low-Voltage Switchgear		2/22/2025	2/22/2025			Day(s): 0, Hour(s): 0, Minute(s): 2, Second(s): 26.3	Attended
 e-Learning Course: Eaton Electrical - SEM + Addendum		2/22/2025	2/22/2025		16.67 Failed	Day(s): 0, Hour(s): 0, Minute(s): 2, Second(s): 23	Attended
 e-Learning Course: Sales Training Exam: Eaton G4 Rack PDUs		2/22/2025	2/22/2025		55.55 Failed	Day(s): 0, Hour(s): 0, Minute(s): 0, Second(s): 59.2	Attended
 e-Learning Course: Sales Training Exam: How to Sell More Cables and Connectivity		2/22/2025	2/22/2025		80	Day(s): 0, Hour(s): 0, Minute(s): 0, Second(s): 42.6	Attended
 e-Learning Course: Surge Solutions		2/22/2025	2/22/2025		25 Failed	Day(s): 0, Hour(s): 0, Minute(s): 2, Second(s): 10.3	Attended
 e-Learning Course: Power press Training Module 1 - PPE & Housekeeping		10/27/2024	2/22/2025			Day(s): 0, Hour(s): 0, Minute(s): 1, Second(s): 14	Attended
 e-Learning Course: Functional Skills Workshop: Human Resources [eLearning]		2/21/2025	2/21/2025			Day(s): 0, Hour(s): 0, Minute(s): 1, Second(s): 19	Attended

Engineering Documentation: From Global Standards to Personal Portfolios

The Anatomy of a Formal Standard (MIL-STD)

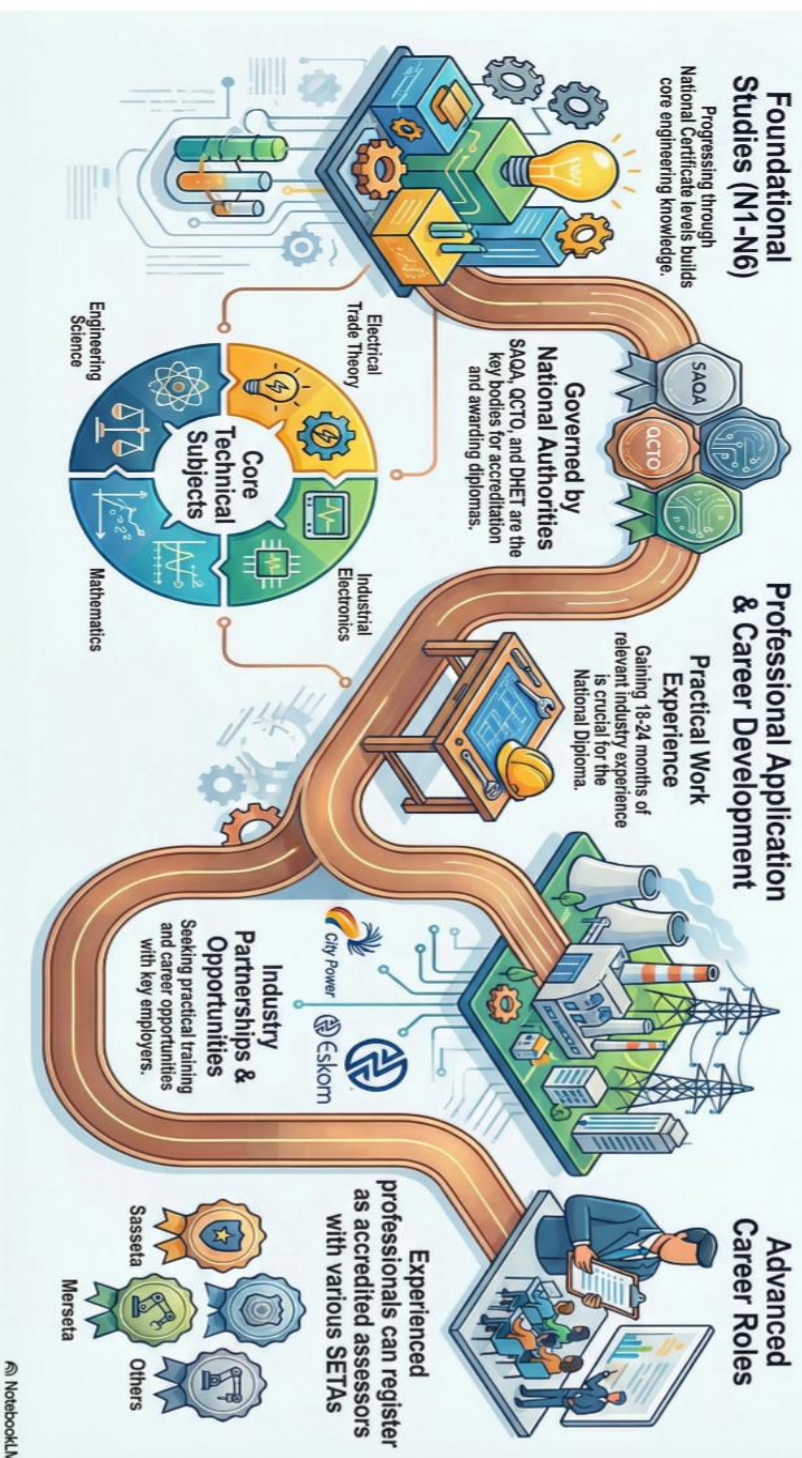


Building a Technical Career Portfolio



© NotebookLM

The Electrical Engineer's Journey: From Qualification to Career



Sources

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AA-N4-N6-Electrical-Fact-Sheet-1.pdf

☐

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careee 30 tshingombe.pdf2.pdf



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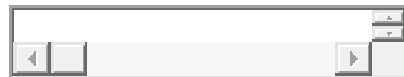


Chat



engineering certificate award diploma trade union working barganing //CCMA, PSiRA, and SAPS: A Regulatory Nexus

50 sources



50 sources

Studio



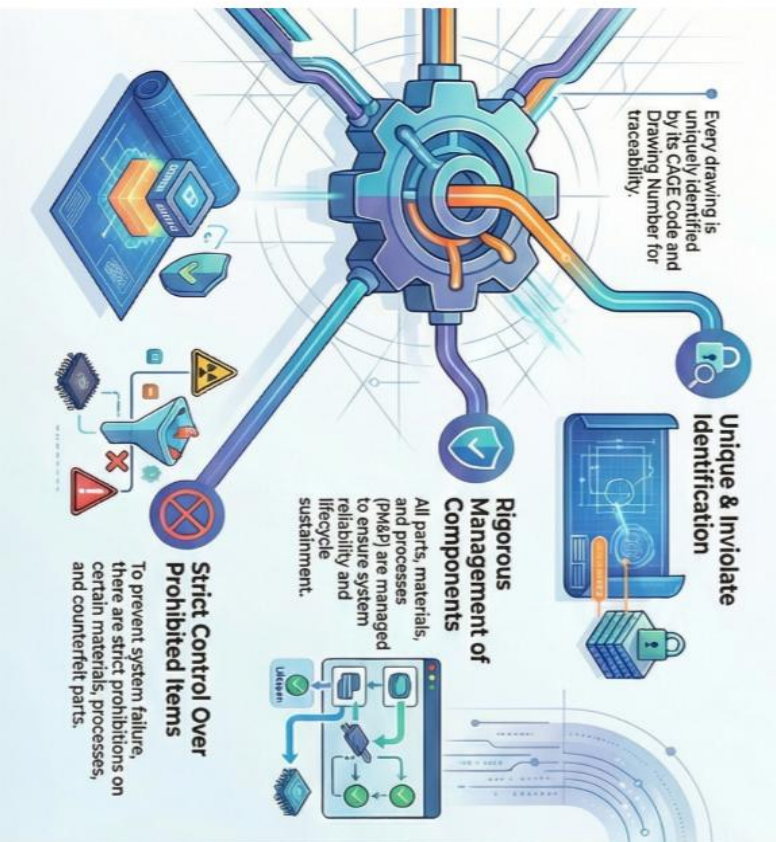
Based on 50 sources

NotebookLM can be inaccurate; please double check its responses.

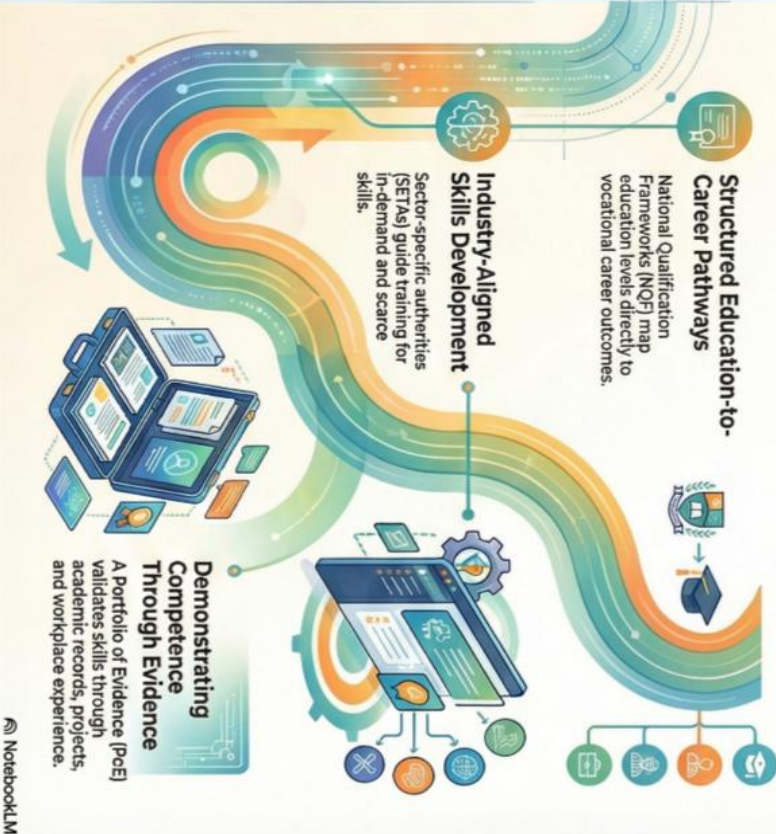
If you want, I can generate a compact, printable PoE template and a WE/WA mapping sheet you can attach to each project, plus a VBA-ready credential tracker with the cost and award equations embedded for automated audit reporting.

Engineering Documentation: From Global Standards to Personal Portfolios

The Anatomy of a Formal Standard (MIL-STD)

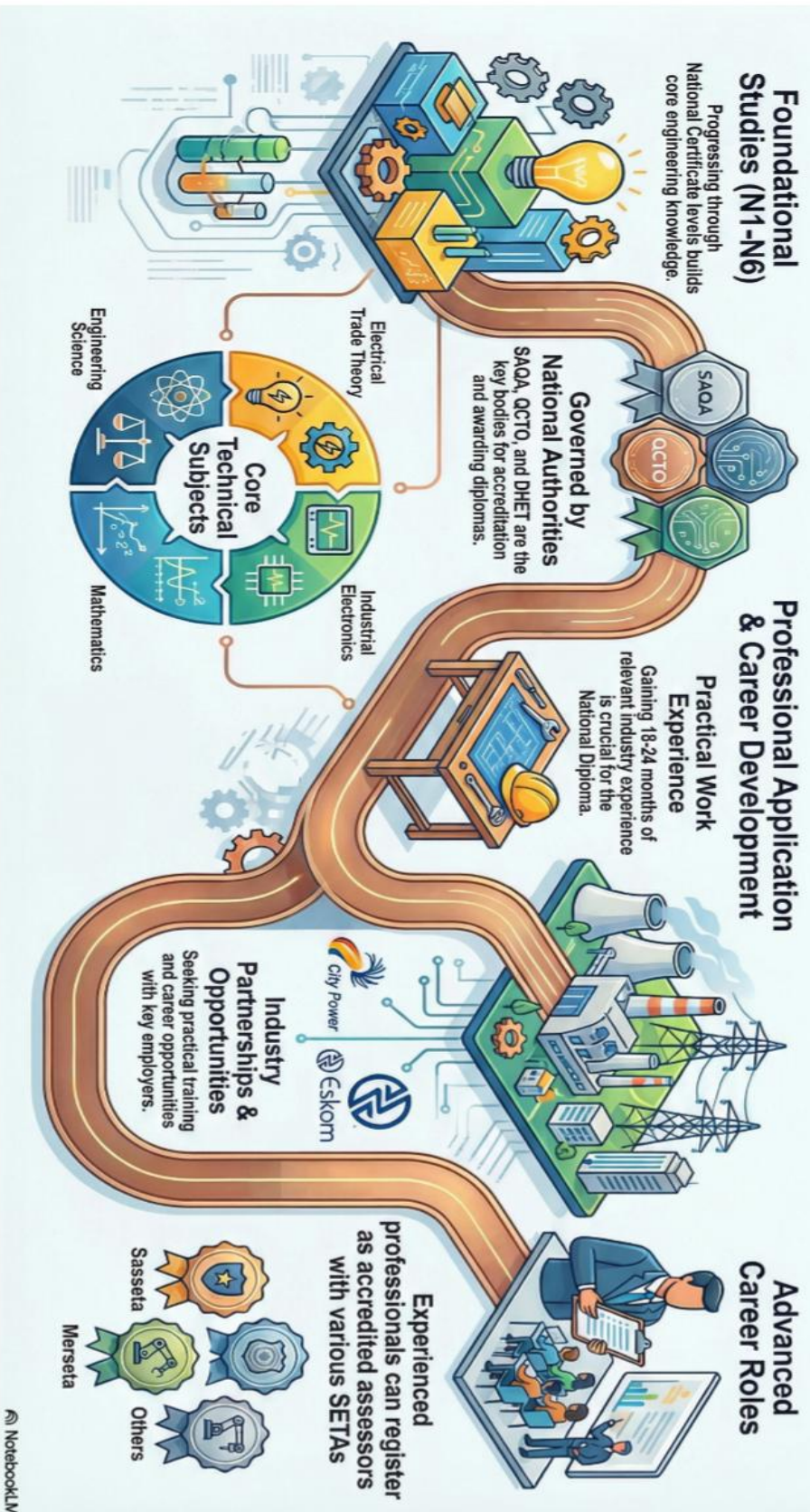


Building a Technical Career Portfolio



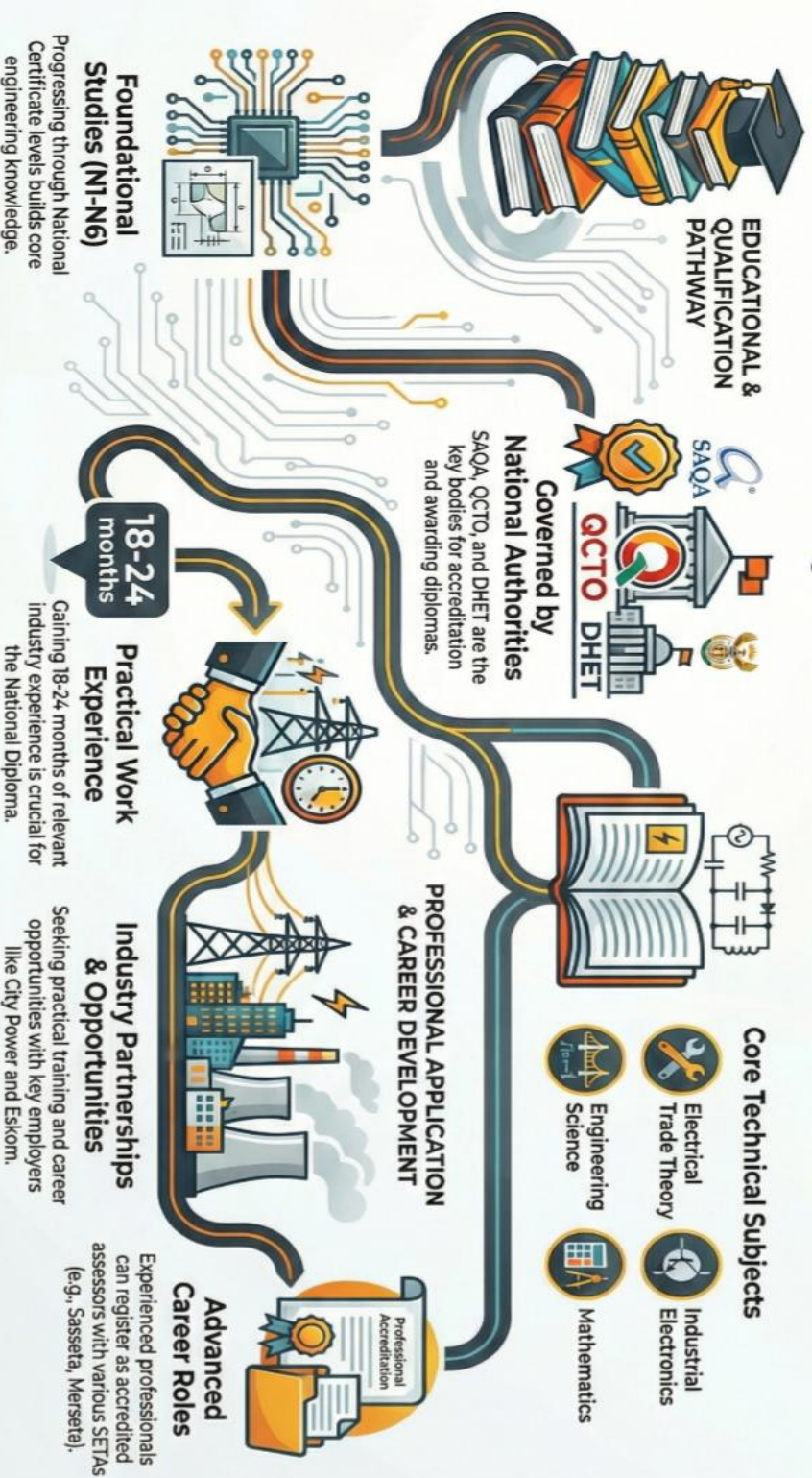
NotebookLM

The Electrical Engineer's Journey: From Qualification to Career



Printout

The Electrical Engineer's Journey: From Qualification to Career



Blueprint for a Modern Technical Career

Foundational Engineering Education



National N Diploma in Electrical Engineering (NQF Level 6)

A 360-credit qualification combining N4-N6 theory with 24 months of workplace experience.



Comprehensive Curriculum from Core Theory to Advanced Systems

Covers subjects from DC Theory and Electro-technics to Control Systems and Supervisory Management.



Mastery of Industry Standards & Compliance



Expertise in Military & Commercial Standards for High-Reliability Systems

Ensures product safety, reliability, and lifecycle management in demanding environments.



Focus on Lifecycle Management and Counterfeit Prevention

Emphasizes supplier validation, component testing, and dewatering to ensure system integrity.



Integrated Systems & Automation



Building an Audit-Ready Digital Portfolio of Evidence (PoE)

A system linking credentials, projects, and assessments into a transparent, verifiable record.



Automation for Traceability and Compliance

Uses custom tools (VBA) to create dashboards and logigrams that map career pathways.



Connecting to a Global Credentialing Ecosystem

Exports verified records to platforms like GitHub and SAQA/NQF dashboards for validation.



Category E:
Stationary Ground Systems
(Controlled environments)



Category D:
Ground & Sea Mobile Systems
(Repairable, shock, vibration)



Category C:
Aircraft Systems (Vibration, turbulence, pressure changes)



Category A & B:
Space Systems
(Continuous use, non-repairable)

The Resilient Engineer's Blueprint

A Framework for Achieving Pristine Technical Mastery
in a World of Systemic Bureaucratic Friction

APPROVED BY
DATE: OCT 26, 2023

NotebookLM

The Promise of a Structured Pathway: The National N-Diploma Framework

The National N-Diploma in Electrical Engineering is designed as a progressive, year-long program built on a logical sequence of theoretical knowledge. This structure promises a clear path from foundational principles to advanced application.

N4 Certificate

- Mathematics
- Engineering Science
- Industrial Electronics
- Electro-technics
- Digital Electronics

N5 Certificate

- Mathematics
- Power Machines
- Industrial Electronics
- Electro-technics
- Supervisory Management

N6 Certificate

- Mathematics
- Power Machines
- Industrial Electronics
- Electro-technics
- Supervisory Management
- Control Systems
- Installation Rules
- Specialised Electric Codes

Key Takeaway: The curriculum requires a 40% minimum pass per subject and culminates in a diploma after 2 years of documented practical experience, creating a well-defined standard for competency.

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-001

NotebookLM

Despite a well-defined curriculum, the path to qualification is often obstructed by systemic administrative failures. These challenges move the engineer's focus from technical problems to bureaucratic battles.


CCMA
 CONSUMER COMPLAINTS MEDIATION ARBITRATION

CERTIFICATE OF OUTCOME
 Case Number: **GAJECo - S**
 Date: **21 OCT 2016**
 Checklist:
☐ Unfair Dismissal
☒ Unfair Discrimination
☐ Contractual Dismissal
☐ Accretion to Unfair Dismissal


PSIRA
 PRIVATE SECURITY INDUSTRY
 REGULATORY AUTHORITY

COMPLAINT NAME:
COMPLAINT FORM:
CASE NO.:
DETAILED PARTICULARS OF COMPLAINT:
Failure to process application despite multiple submissions and payments. Delays are severely impacting employment prospects.
PERSON AND PARTICULARS OF COMPLAINT:


SOUTH AFRICAN POLICE SERVICE
POINTOUT NOTE
HILLBROW
 Case No: **Co20 01313HS**
 Case name: **Hillbrow Vank & Co**
 Case enroute: **South African Police Service**
 Date: **27 JUN 2017**
 Date issued: **27 JUN 2017**
 (print name)

OTHER EMPLOYER POLICE SERVICE OFFICIALS:
 (print name)

Learner Name	Submission Timestamp	Status
John Doe	2023-01-16 13:31	Pending
Jane Smith	2023-03-21 15:45	Pending
Robert Chen	2023-05-10 09:12	Pending
Emily Davis	2024-02-12 11:36	Submitted

Systemic delays in processing submissions create significant bottlenecks.

Forging the Toolkit: Mastering the Uncompromising Language of Reliability

To navigate a system where credentials can be questioned, one must build a foundation on indisputable, globally recognized standards. Military (MIL-STD), international (IEC), and industry (IPC) specifications become the vocabulary of verifiable excellence.



These standards provide a framework for consistency, interoperability, and audit-ready documentation, forming the bedrock of a resilient engineering practice.

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-004

NotebookLM

Deconstructing Reliability: Inside MIL-STD-11991B Parts, Materials, and Processes (PM&P)

This standard establishes rigorous requirements for every component in a military system, focusing on counterfeit prevention, lifecycle management, and documented quality.

Excerpt from Appendix H

Key Definitions

Term	Definition
Approved Supplier	Formally assessed supplier with adequate procedures for providing parts/materials, including counterfeit avoidance...
Authorized Supplier	Supplier authorized by the original component manufacturer (OCM) to buy parts directly.
Broker	Unauthorized supplier, typically independent distributor, buying/selling parts without stock or OCM authorization.
COTS item	Commercially Available Off-the-Shelf item: sold in substantial quantities in marketplace and avoids to authorize intense physical equipment...
Counterfeit Part	Unlawful/unauthorized reproduction, substitution, or alteration misrepresented as authentic.
Derating	Using components below maximum ratings to improve reliability.

Incoming Inspection Data Requirements (Appendix H)

Requirement	Applies to: EEE parts	Applies to: Mechanical parts	Applies to: Materials
Database fields maintained for life	✓	✓	✓
Documented procedures for tests	✓	✓	✓
Radiological inspection (X-ray)	Yes (as applicable)	✓	—
DPA (Destructive Physical Analysis)	Categories A-B required	—	—
XRF (material discrepancies)	✓	—	—
PIND (Particle Impact Noise Detection)	Categories A-C, T	—	—

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-005

NotebookLM

Proving Robustness: Environmental and Mechanical Stress Testing in Practice

Compliance is not theoretical. MIL-STD-202G and MIL-STD-810 mandate a battery of tests that subject components to the harsh realities of their operational environment, from thermal shock to random vibration.

Thermal Shock (Method 107G)

Table 107I. Thermal Shock (Air)

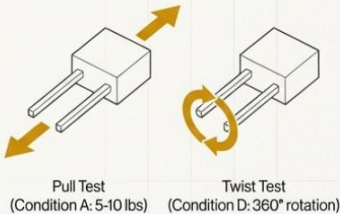
Step	Temp Profile (°C)	Cycles
A	-55 → +25 → +85 → +25	5, 25, 50, 100
B	-65 → +25 → +125 → +25	5, 25, 50, 100
F	-65 → +25 → +150 → +25	5, 25, 50, 100

Random Vibration (Method 214A)

Table 214I. Test Condition I

Test Condition Letter	Power Spectral Density (g ² /Hz)	Overall RMS G
A	0.02	5.35
B	0.04	7.56
C	0.06	9.26
D	0.10	11.95

Terminal Strength (Method 211A)



PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-006
NotebookLM

Building Fluency Across Ecosystems: Integrating Military, Safety, and Commercial Standards

Mastery requires navigating the intersection of military documentation standards (MIL-STD-100G) and international hazard-based safety standards (IEC 62368-1). Understanding both is critical for designing ruggedized, safety-critical systems.

MIL-STD-100G vs. IEC 62368-1:2024

Dimension	MIL-STD-100G	IEC 62368-1:2024
Safety Focus	Critical Safety Items (CSI) & Characteristics	Hazard-Based Safety Engineering (HBSE)
Drawing Practices	Prescriptive drawing formats (ASME Y14.100M)	Performance-based; documentation must support risk assessment
Change Control	Formal revision blocks and engineering evaluation for changes to CSIs	Changes affecting safeguards require an updated risk assessment
Qualification	Source control qualification by design activity	Certification by accredited labs (e.g., CB Scheme, NRTL)

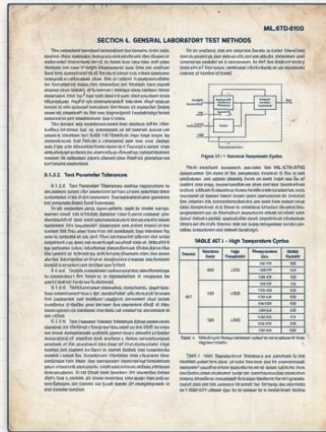
Key Intersection Point:
Risk-Based vs. Prescriptive

Key Intersection Point:
Risk-Based vs. Prescriptive

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-007
NotebookLM

Forging Tools of Order: Automating Compliance and Audit Readiness

Faced with hundreds of pages of dense standards, the resilient engineer builds tools to automate the process. Custom Visual Basic (VBA) scripts transform static documents into dynamic, audit-ready checklists, logigrams, and competency matrices.



Parse & Systematize

```

Sub BuildMilStd810AuditChecklist()
    Dim ws As Worksheet
    Dim milStdDoc As String
    Dim auditTable As ListObject

    ' Define patterns to search in the MIL-STD document
    sectionPatterns = Array("Applicability to \"ruggedized\" ...",
        "Related documents", ...)
    .Range("A1").Value = "Section"
    .Range("A1").Value = "Section"

    ' Create new worksheet for the checklist
    Set ws = ThisWorkbook.Worksheets.Add
    ws.Name = "Audit_Checklist"

    ' Set up table headers
    .Range("B1").Value = "Requirement"
    .Range("C1").Value = "Compliance Status"
    .Range("D1").Value = "Evidence / Notes"
    
```

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-008

NotebookLM

The Indisputable Artifact: Compiling the Portfolio of Evidence (PoE)

In an environment where systemic processes can fail, the PoE becomes the ultimate proof of competence. It is a meticulously curated collection of verifiable records—from assessment results to workplace logbooks—that demonstrates mastery beyond any single certificate.

Project Artifacts & Technical Drawings

Aligning with MIL-STD-100G



Moderator Reports

Internal and External verification



Internal Continuous Assessment (ICASS) Records

Referencing Report 191 policies and test weightings



DHET Transcript & Submission Records

Showing SAQA IDs and learner identifiers



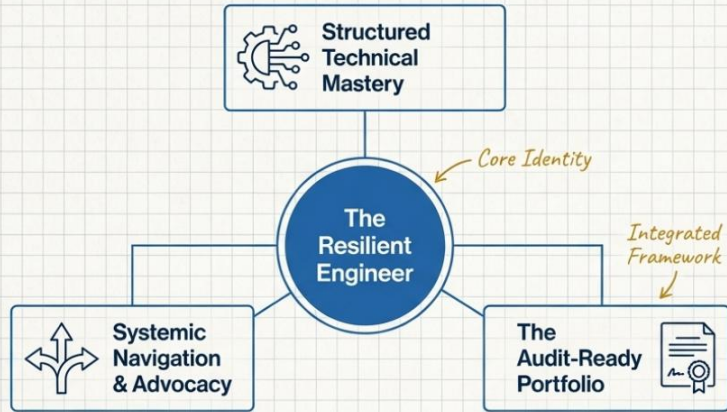
Workplace Logbooks

Documenting 24 months / 2,670 hours of experience

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-009

NotebookLM

The Synthesis: A Blueprint for Professional Resilience and Verifiable Mastery



This framework integrates three critical domains. It moves beyond mere technical skill to build a resilient professional capable of thriving in complex environments by mastering the curriculum, navigating the system, and proving their competence with undeniable evidence.

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-010

NotebookLM

Pillar 1: Integrating World-Class Standards into the Core Curriculum

True mastery connects academic knowledge to the highest industry and military standards. Each subject in the N4-N6 curriculum becomes a platform for applying principles of reliability, safety, and environmental robustness.

N-Diploma Subject (N4-N6)	Linked Standard/Concept
Industrial Electronics (N4-N6)	→ Component Derating Factors (MIL-STD-11991B, Appendix A) PIND Testing (MIL-STD-202G, Method 217A)
Power Machines (N5-N6)	→ EMC/EMI Considerations (MIL-STD-461) Fungi Susceptibility of Materials (MIL-STD-11991B, Table XXXI)
Control Systems (N6)	→ Contact Chatter Monitoring (MIL-STD-202G, Method 310)
Installation Rules (N6)	→ SANS 10142-1 Compliance Wiring & Terminal Strength (MIL-STD-202G, Method 211A)

Direct application of principles

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-011

NotebookLM

Pillar 2: The Systemic Navigation Toolkit

Resilience requires a specific skillset for engaging with administrative and legal systems. This involves leveraging official processes, maintaining meticulous records, and understanding the language of regulatory bodies.



CCMA

Formalizing Disputes

Utilize official channels like the CCMA for dispute resolution to create a formal, documented record of engagement.



Managing Record Integrity

Track all submissions to bodies like DHET and SAQA, documenting dates, names, and statuses to counter delays and build a case for escalation.



PSIRA

Leveraging Regulatory Bodies

File formal complaints with oversight authorities like PSIRA to ensure accountability and trigger official investigation processes.



Engaging Law Enforcement

Use official SAPS processes for documentation, such as point-out notes and case numbers, to create an undeniable record when necessary.

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-012

NotebookLM

Pillar 3: Generating Audit-Ready Proof of Competence

The framework culminates in the production of standardized, evidence-backed documents that map skills to formal requirements. These artifacts are designed for clarity, verifiability, and immediate use in assessment and moderation.

Audit-Ready Checklist Template

Asset ID	Standard Applied	Test Method	Result	Signatures	Evidence Links
PWB-001	IPC-6010 Class 3	Sectioning Analysis	Pass	[Digital Signature]	[Link to Report]

Direct access to raw test data & reports

Competency Matrix (NATED/NCV Mapping)

	Knowledge	Application	Troubleshooting
Diodes & Rectifiers	✓	✓	✓
AC Drives	✓	✓	✓
UPS Systems	✓	✓	
Power System Protection	✓	✓	✓

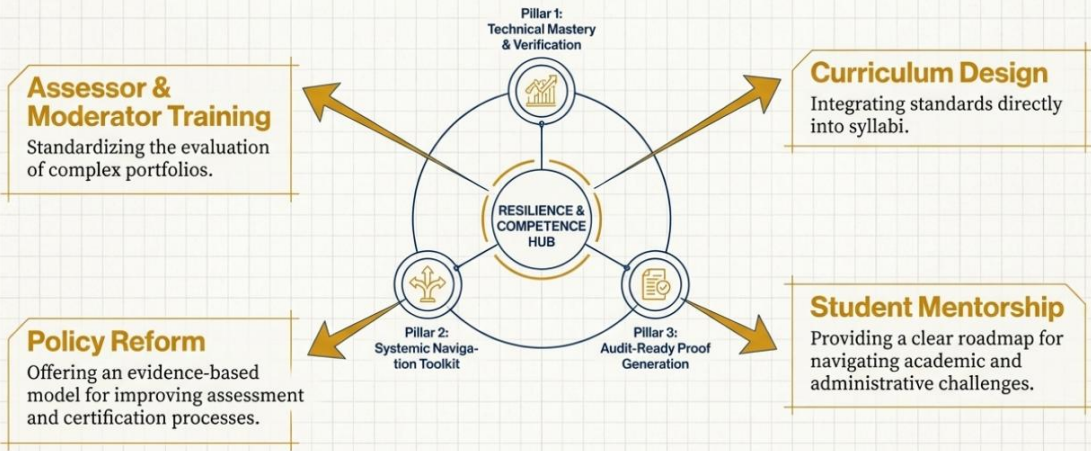
Demonstrates practical problem-solving ability

PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: ELEC-ENG-013

NotebookLM

From Personal Journey to a Replicable Blueprint for the Next Generation

This framework is more than a personal survival guide; it is a scalable blueprint for reforming technical education. It provides a model for mentors, a guide for students, and a case study for policymakers on how to build resilience and verifiable competence into the heart of our engineering pathways.



PROJECT: N-DIPLOMA FRAMEWORK // DRAWING NO: FI-EC-FNG-014

NotebookLM

Mastery vs. The Maze: The Two Fronts of a Modern Technical Career

THE FRONTLINE OF TECHNICAL MASTERY

Adherence to Strict Standards is Non-Negotiable

Compliance with military and industrial standards (e.g., MIL-STD, SANS) is critical for reliability.

Fluency in Modern Tools is a Requirement

Professionals must use modern tools like PLCs, SCADA, Visual Basic, Azure, and AI.

Mastery of Advanced Theory is Essential

Modern vocational engineering requires a deep understanding of calculus, physics, and circuit theory.

THE BATTLEGROUND OF BUREAUCRACY

Systemic Failures Create Major Obstacles

Professionals face decades-long certification backlogs, administrative delays, and exam irregularities.

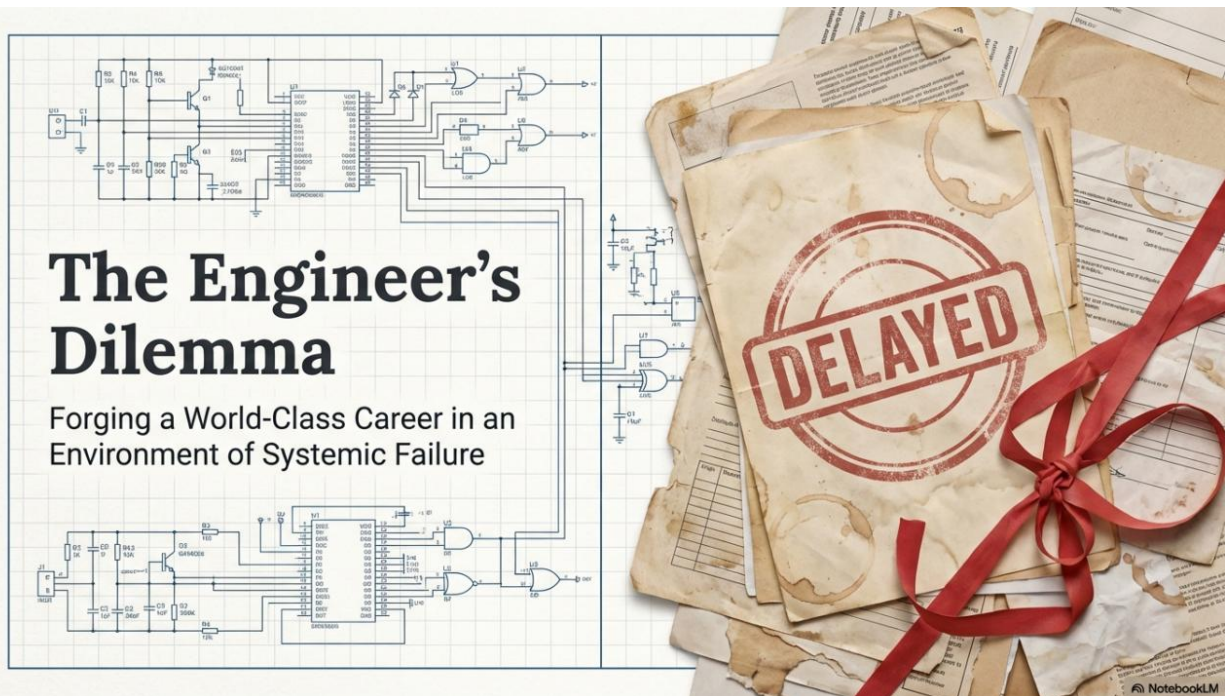
Navigating a Maze of Regulatory Bodies is a Constant Fight

Success requires managing complex frameworks from SQA, DHET, QCTO, and multiple SETAs.

A "Portfolio of Evidence" is the Ultimate Defense

A career is proven not by a resume, but by a collection of documented proof.

NotebookLM



The Engineer's Dilemma

Forging a World-Class Career in an Environment of Systemic Failure



Imagine training to be a world-class pilot.

You have mastered aerodynamics, navigation, and advanced aircraft systems. Your technical skill is undeniable.

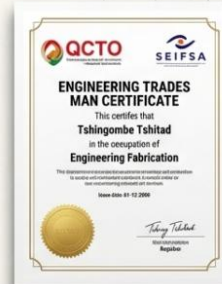
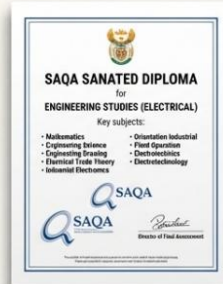
But every time you apply for your license, the aviation authority loses your paperwork, delays your exams, or invalidates your results.

To fly, you need two things: the skill to handle the plane and the resilience to survive the bureaucracy.

This is the reality for a modern engineer in South Africa.

The First World: A Universe of Technical Precision

Success demands mastery over a vast and complex technical landscape, governed by physics, advanced mathematics, and uncompromising international standards.



Advanced Mathematics: Calculus, Laplace transforms, and differential equations for system analysis ($E = \int P(t)dt$, $V = Ldi/dt$).



Power Systems: Design and analysis of AC/DC machines, transformers, and three-phase distribution.



Digital Control: Logic gates, Boolean algebra, and PLC/SCADA systems for industrial automation.



International Standards: Adherence to strict military (MIL-STD) and industrial (IPC) standards for mission-critical reliability.

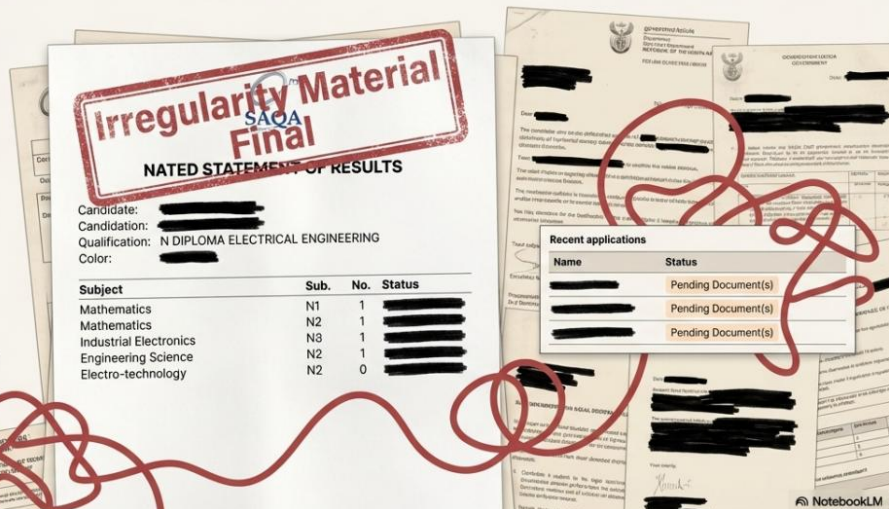
NotebookLM

The Second World: A Maze of Administrative Struggle

Parallel to the world of technical logic is a dysfunctional qualification system plagued by decades of **systemic failure**, creating immense obstacles for even the most qualified professionals.

Systemic Failures

- **Certification Backlogs**:** Official records document delays in issuing diplomas dating back to 1992.
- **Examination Irregularities**:** Widespread issues leading to invalidated results and paused qualifications.
- **Fragmented Frameworks**:** A complex and often misaligned system of regulatory bodies (SAQA, DHET, QCTO, SETAs).



NotebookLM

The Core Conflict: Technical Mastery vs. Bureaucratic Resilience

“The Real Final Boss is Bureaucracy.”

Technical Mastery



Administrative Struggle



The defining challenge is not a lack of skill, but the need to possess elite-level technical expertise while simultaneously navigating a broken administrative system. This dual competency is the unspoken requirement for success.

NotebookLM

The Response: Building a Career as a Portfolio of Evidence

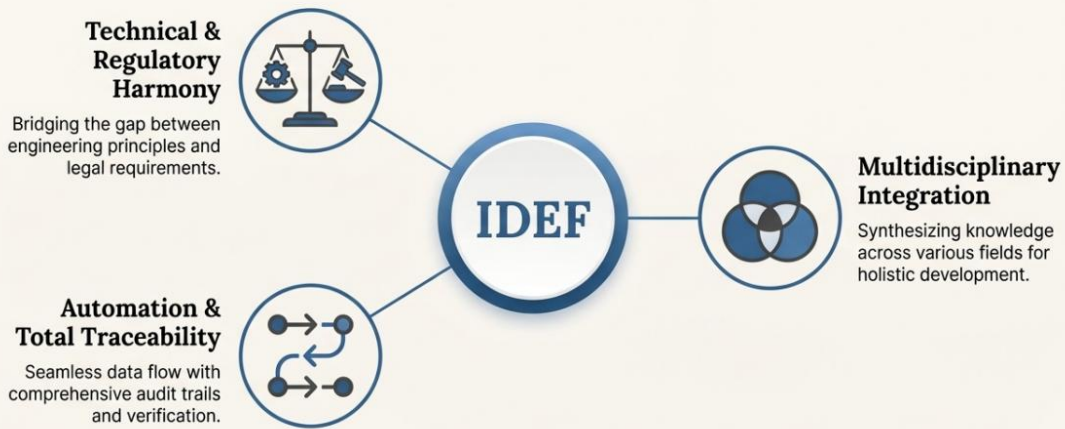
The solution was not born from theory, but forged through a documented journey of continuous learning and system navigation. This career is not a static resume; it is an auditable, credential-linked portfolio proving mastery across multiple domains.



NotebookLM

The Solution: An Integrated Framework for Education and Credentialing

The IDEF is a modular, credential-linked system designed to harmonize technical training, regulatory compliance, and career development. It creates a transparent, auditable, and resilient ecosystem for learners and institutions.



NotebookLM

Pillar 1: Harmonizing Technical Curriculum with Regulatory Standards

The framework aligns every module, from foundational theory to advanced practice, with both national (SAQA/NQF) and international (SQA/SCQF) standards. This ensures that qualifications are verifiable, portable, and industry-relevant.

Key Alignments

- Foundational**: NATED N1-N6 subjects (Electrical Trade Theory, Industrial Electronics, Mathematics) form the core.
- Vocational**: Competencies map directly to QCTO trade qualifications and MERSETA requirements.
- International Benchmarking**: Curricula are compared against frameworks like the Scottish SQA Advanced Diploma in Electrical Engineering (SCQF Level 8).



NotebookLM

Pillar 2: Achieving Total Traceability through Automation

The system's backbone is an automation engine built with **Visual Basic (VBA)**. It transforms manual, error-prone administrative tasks into a transparent, real-time, and audit-ready digital process.

System Features



Logigrams & Algorigrams: Automate workflows for assessment, compliance, and even disciplinary procedures.



Credential-Linked Dashboards: Provide live tracking of learner progress, awards, and costs.



Audit-Ready Exports: Generate bilingual (English/French), traceable records for regulatory bodies like SAQA and Umalusi.

```
Sub GenerateReport()  
    Dim wb As Workbook  
    Set wb = ThisWorkbook  
    Dim ws As Worksheet  
    Set ws = wb.Sheets("Report")  
    Dim chartObj As Chart  
    For Each chartObj In ws.ChartObjects  
        chartObj.Chart.Refresh  
    Next chartObj  
  
    Dim pdfPath As String  
    pdfPath = "C:\Users\user\Documents\Report.pdf"  
    ws.ExportAsFixedFormat 1, pdfPath  
    ws.Export  
    MsgBox "Audit report generated successfully."  
End Sub  
  
Function GetLearnerProgress(learnerID As String) As Double  
    'Code to calculate progress  
End Function  
  
Sub UpdateDashboardData()  
    'Refresh data from database  
End Sub
```



NotebookLM

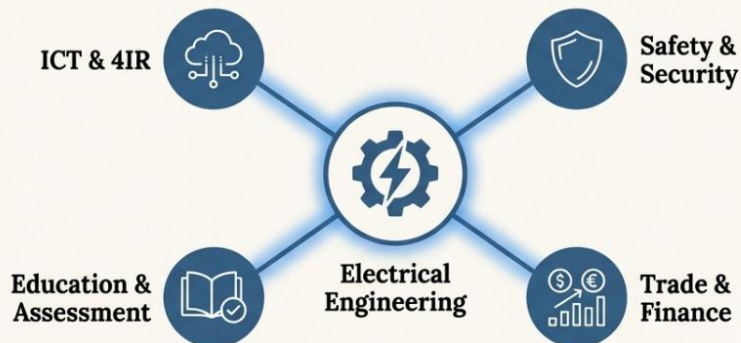
Pillar 3: Integrating Multiple Disciplines for Holistic Problem-Solving

“Specialization is for insects.”

Modern challenges are rarely confined to a single domain. The framework integrates core engineering with ICT, data science, public safety, and financial management to produce versatile professionals who can connect dots and see the whole system.

Integrated Domains

- ICT & 4IR
- Safety & Security
- Education & Assessment
- Trade & Finance



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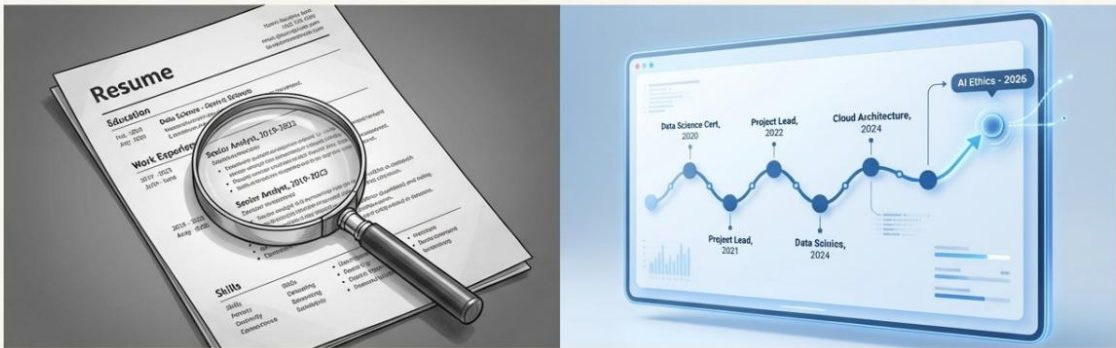
The Output: An Audit-Ready Credential Record Book

The framework culminates in a comprehensive, traceable record of a learner’s entire professional journey. This Portfolio of Evidence (PoE) links every qualification, project, and cost into a single, verifiable ledger, providing irrefutable proof of competence for employers, institutions, and regulatory bodies.

Date	Institution	Item / Credential	Cost	Amendments	Final Balance	Integration Points
2023-12-31	Schneider Electric	EcoStruxure Expert Cert.	R0.00	N/A	R0.00	Mapped to NQF 5; Linked to PoE
2022-12-01	Microsoft	Azure AI Fundamentals	R1,500.00	(R500 Grant)	R1,000.00	Linked to GitHub Repo; 4IR Skills
2025-07-21	SQA	SCQF Level 6 Award	R3,000.00	N/A	R3,000.00	International Benchmark; Articulation Pathway
2024-01-01	DHET	National N Diploma (N6)	R12,000.00	N/A	R12,000.00	SAQA ID 111285; Linked to Logbook
2025-12-01	IJETR	Research Publication	R500.00	N/A	R500.00	ORCID Linked; Professional Contribution

NotebookLM

The Vision: A Career is a Living Document



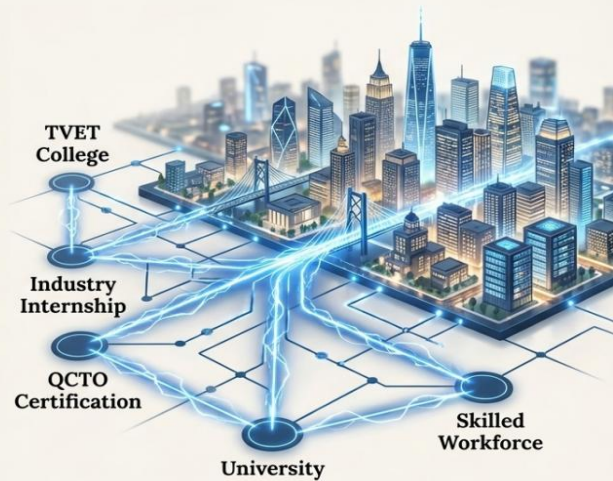
A resume is a static summary of the past. A portfolio of evidence is a living document, constantly evolving with every new skill, project, and certification.

This framework transforms a career narrative from a list of claims into a dynamic, verifiable, and ever-expanding body of proof. It is designed for continuous growth, not just periodic review.

NotebookLM

The Bigger Picture: Education as Critical Infrastructure

Just as a nation relies on its electrical grid for power, it relies on its educational system for skilled human capital. When this system is inefficient or broken, the entire economy suffers. The IDEF treats education not as a service, as a piece of mission-critical infrastructure to be engineered, managed, and optimized for reliability, transparency, and performance. It is a blueprint for building a more resilient and competitive workforce.



NotebookLM

Now, they have the system.

A world-class engineer, like a world-class pilot, deserves a system that recognizes their skill, not one that obstructs it.

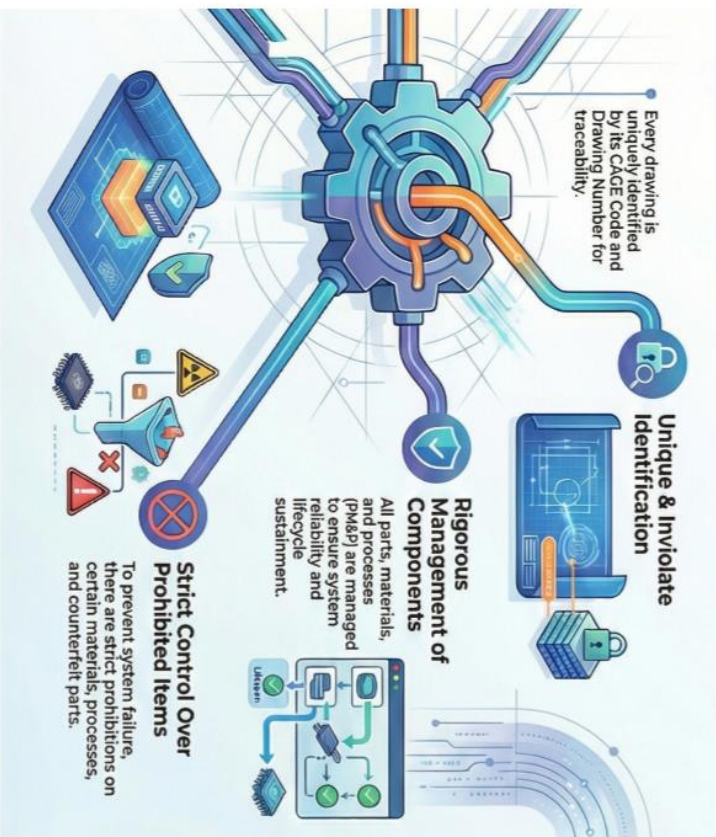
An integrated, transparent, and auditable framework doesn't just issue certificates—it clears the runway for takeoff.

NotebookLM

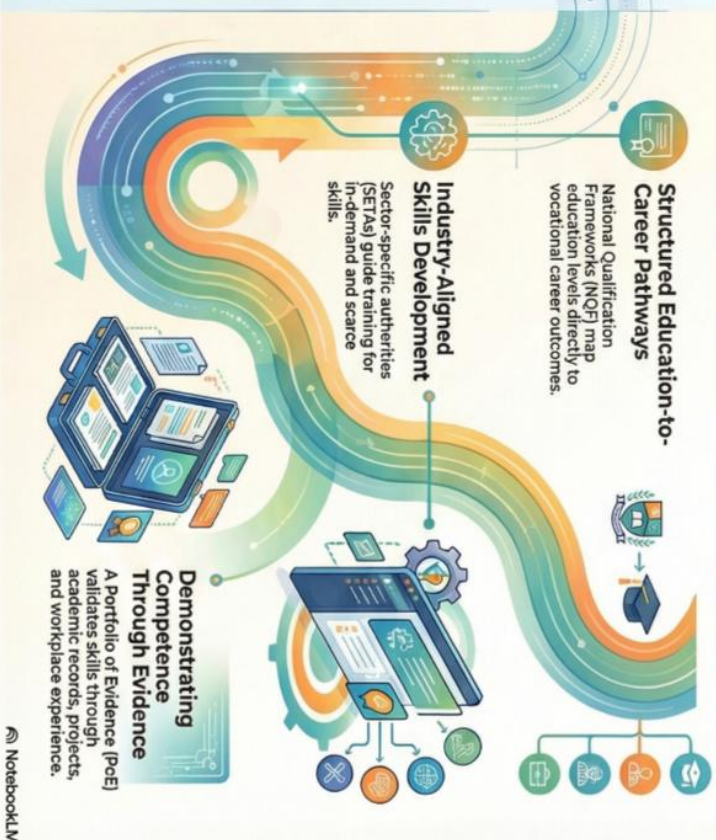


Engineering Documentation: From Global Standards to Personal Portfolios

The Anatomy of a Formal Standard (MIL-STD)

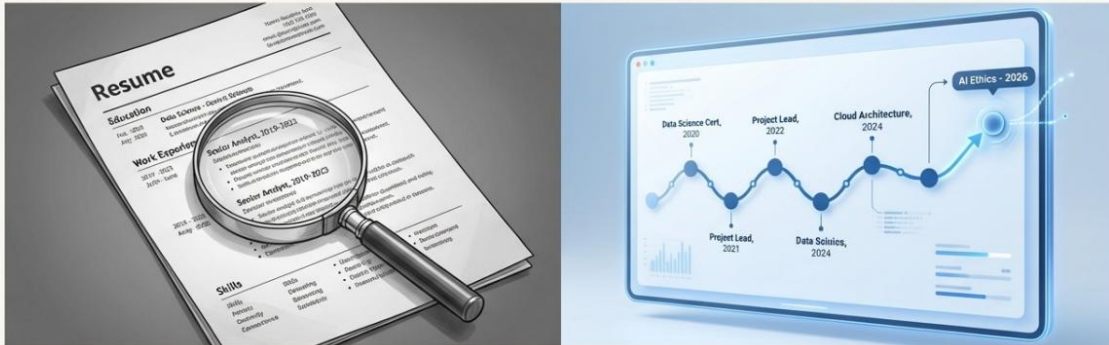


Building a Technical Career Portfolio



NotebookLM

The Vision: A Career is a Living Document



A resume is a static summary of the past. A portfolio of evidence is a living document, constantly evolving with every new skill, project, and certification.

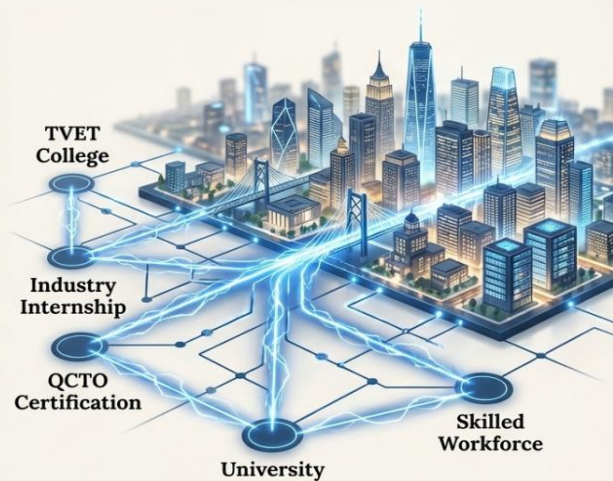
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NotebookLM



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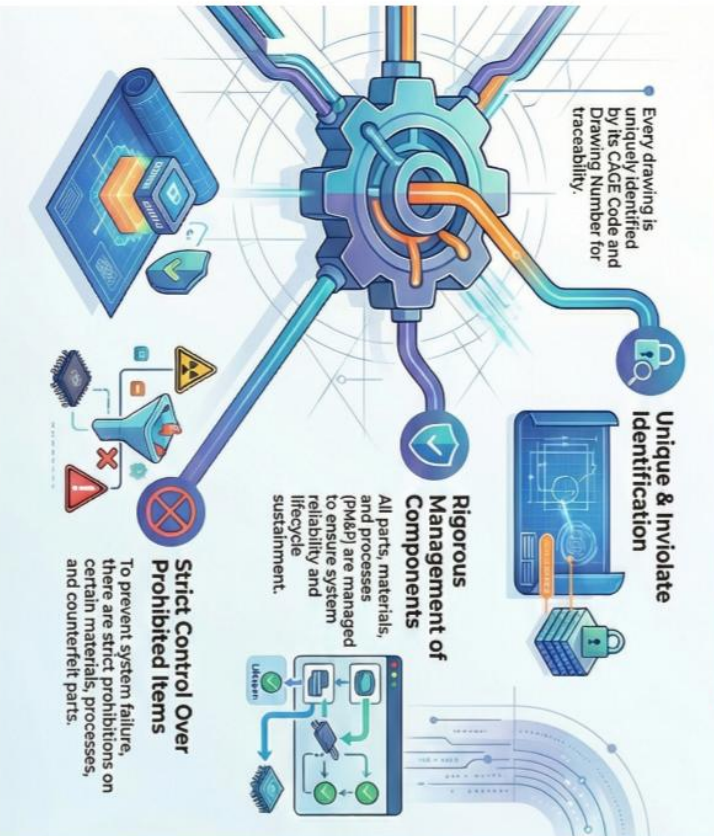
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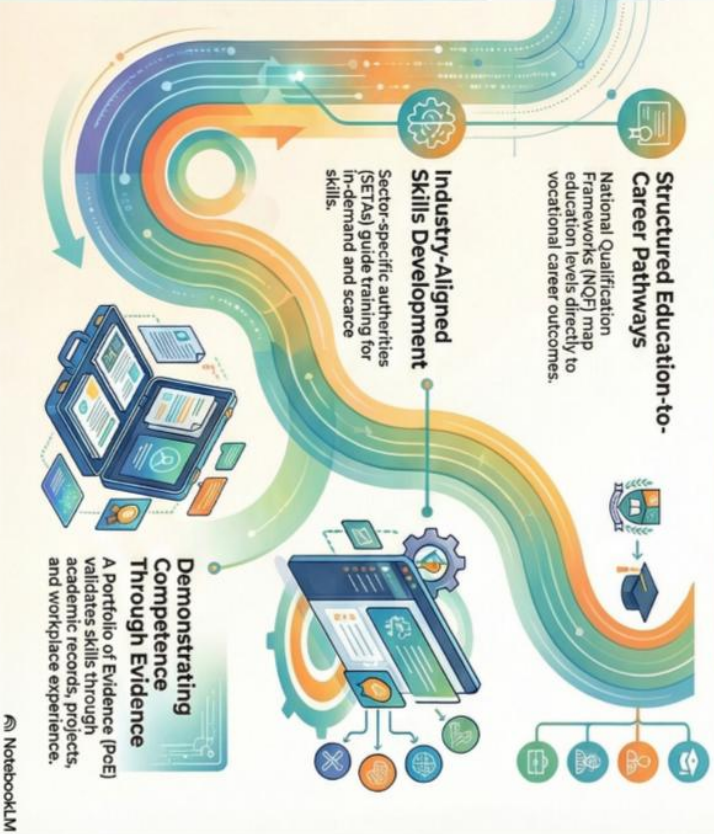
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Engineering Documentation: From Global Standards to Personal Portfolios

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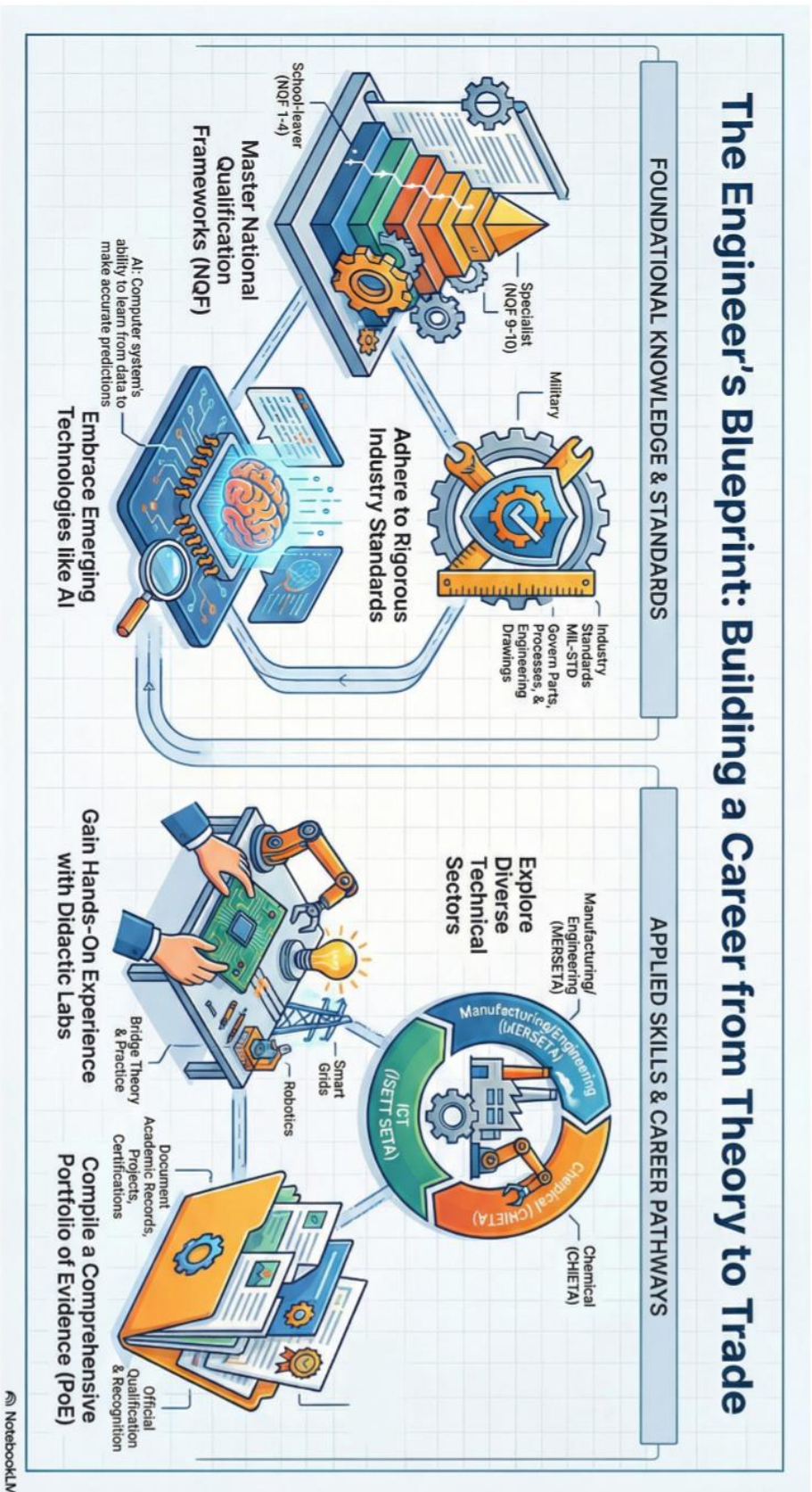


Building a Technical Career Portfolio



NotebookLM

The Engineer's Blueprint: Building a Career from Theory to Trade



Bridging the Gap: Reforming South Africa's Vocational Engineering Education

THE CHALLENGE: SYSTEMIC HURDLES IN TVET ENGINEERING

THE PATH FORWARD: A BLUEPRINT FOR REFORM

Inconsistent Qualification Frameworks

Challenges exist in combining NATED & NCV qualifications, creating backlogs and policy irregularities.

Disconnect Between Training and Industry

National frameworks often don't match local industry needs, limiting practical workplace learning.

Widespread Assessment & Integrity Issues

Students face examination irregularities, delayed results, and issues with non-accredited institutions.

Modernize with Education Technology

Implement Learning Management Systems (LMS) to enhance curriculum delivery, track progress, and support students.

Integrate NATED & NCV Systems

Combine national diploma and certificate frameworks for a more effective and streamlined vocational system.

Strengthen Work-Integrated Learning

Align classroom learning with industry placements and hands-on experience at companies like Eskom and City Power.

The Engineer's Odyssey

Charting the Path to Technical Mastery in South Africa

NotebookLM

The Quest for Qualification

The journey to becoming an electrical engineer in South Africa is a demanding odyssey. It challenges a candidate to transform theoretical knowledge into practical, certified expertise.

The Protagonist

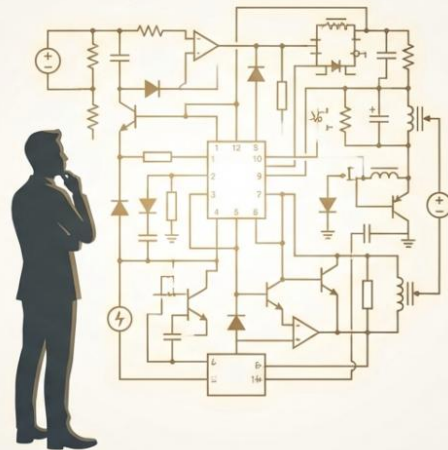
An aspiring technician, our "Candidate," embarks on this path.

The Goal

To earn the National N Diploma in Electrical Engineering, a qualification registered by the South African Qualifications Authority (SAQA) that signifies readiness to power the nation's industry.

The Path

A structured progression through National Accredited Technical Education Diploma (NATED) courses, from N1 to N6, combining rigorous classroom theory with essential workplace experience.



NotebookLM

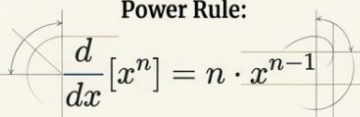
Forging the Foundation: The Language of Engineering

Before building circuits, the Candidate must master the language of change and accumulation: Calculus. These mathematical principles are the essential tools for analyzing dynamic systems.

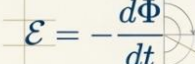
Differential Calculus (The Science of Change)

Used to analyze rates of change, crucial for understanding velocity, acceleration, and current.

Power Rule:


$$\frac{d}{dx} [x^n] = n \cdot x^{n-1}$$

Faraday's Law of Induction:

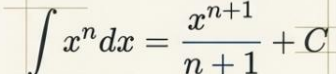

$$\mathcal{E} = -\frac{d\Phi}{dt}$$

(Relates changing magnetic flux to induced voltage)

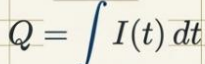
Integral Calculus (The Science of Accumulation)

Used to calculate total values over time, like energy, charge, or area.

Power Rule for Integration:


$$\int x^n dx = \frac{x^{n+1}}{n+1} + C$$

Electric Charge Calculation:


$$Q = \int I(t) dt$$

(Calculates total charge from a varying current)

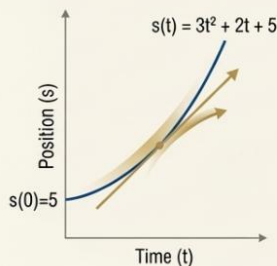
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From Abstract Equations to Engineering Principles

The Candidate's first challenge is to apply these mathematical tools to describe and predict the behavior of physical systems.

Application Area 1: Motion Analysis

Calculus is used to derive velocity and acceleration from an object's position over time.



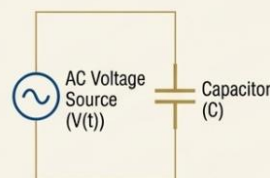
Example: If position is $s(t) = 3t^2 + 2t + 5$, then:

Velocity is the first derivative:
 $v(t) = s'(t) = 6t + 2$

Acceleration is the second derivative:
 $a(t) = s''(t) = 6$

Application Area 2: Alternating Current (AC) Circuit Theory

Derivatives and integrals are essential for analyzing the behavior of capacitors and inductors in AC circuits.



Example: The current flowing through a capacitor is proportional to the rate of change of voltage across it.

Capacitor Current:
 $I(t) = C \frac{dV(t)}{dt}$

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Ascending the Levels: The NATED N1-N3 Gauntlet

The Candidate's journey progresses through the initial NATED levels, where foundational theory meets practical application. These modules build a working knowledge of the components that power daily life.



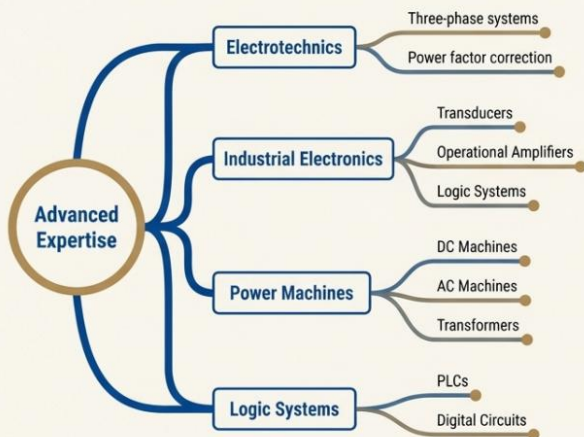
Core N1-N3 Modules Include:

- **Electrical Trade Theory:** Understanding the fundamental laws (Ohm's, Kirchhoff's) and principles of electricity.
- **Industrial Electronics:** Introduction to basic components like diodes and transistors.
- **Engineering Science & Drawing:** Applying physics and learning the visual language of technical blueprints.
- **Mathematics:** Reinforcing the core mathematical skills required for all technical calculations.



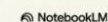
The Crucible of Advanced Theory: N4-N6

In the senior NATED levels, the Candidate confronts the most complex challenges. The focus shifts from basic components to the analysis and design of high-power industrial systems, logic control, and electromechanical machinery.



Key N4-N6 Subjects:

- * **Electrotechnics:** Advanced circuit analysis, including three-phase systems and power factor correction.
- * **Industrial Electronics:** Deeper dives into transducers, operational amplifiers, oscillators, and logic systems (Boolean Algebra, logic gates).
- * **Power Machines:** Detailed study of DC and AC machines (motors, generators) and transformers.
- * **Logic Systems:** Design and troubleshooting of Programmable Logic Controllers (PLCs) and digital circuits.



Mastering the Engineer's Toolkit

Within the advanced modules, the Candidate learns to wield powerful analytical tools to solve critical engineering problems, from optimizing power transmission to designing control systems.

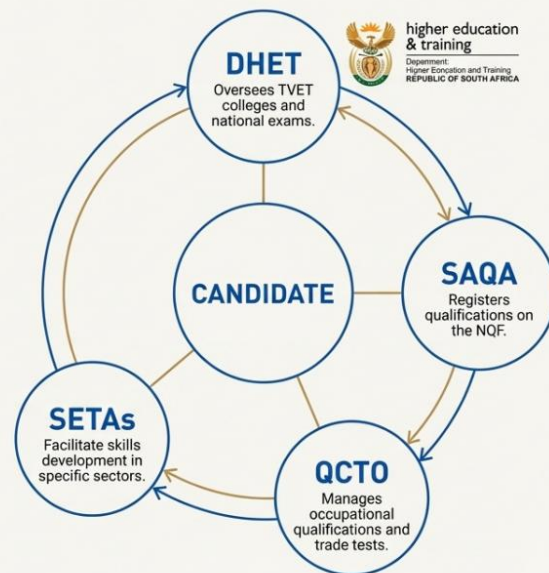
Calculus in Action: Selected N4-N6 Applications

Engineering Problem	The Mathematical Tool	Application
Calculating Power Loss in Transmission Lines	Integral Calculus $P_{loss} = \int_0^T I^2(t)R dt$	Determines the total energy lost as heat in a transmission line over a period T.
Designing AC Machine Components	Integral Calculus Torque Calculation in AC Machines	Integrals are used to calculate the average torque produced by the fluctuating magnetic fields.
Analyzing RLC Circuits	Differential Equations RLC Circuit Analysis	Models the behavior of circuits containing resistors, inductors, and capacitors, essential for designing filters and oscillators.
Simplifying Digital Logic	Boolean Algebra De Morgan's Theorems	Simplifies complex logic gate networks, leading to more efficient and cost-effective digital system design.

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Navigating the Institutional Gateway

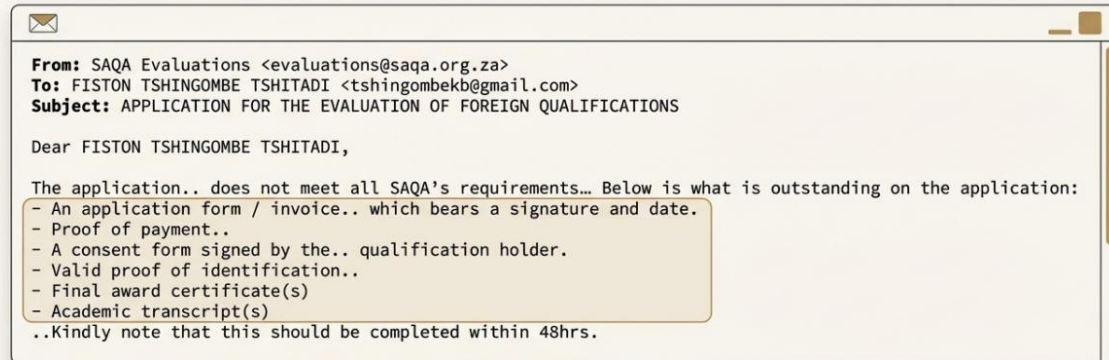
Technical skill alone is not enough. The Candidate must navigate a complex landscape of regulatory and educational bodies to have their knowledge officially validated and certified under the South African National Qualifications Framework (NQF).



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The Gatekeeper's Challenge: A Case Study

The path to qualification is paved with precise documentation. A single missing document can halt the entire process. This email from SAQA to a candidate highlights the meticulous requirements for the evaluation of foreign qualifications, a common step for many applicants.

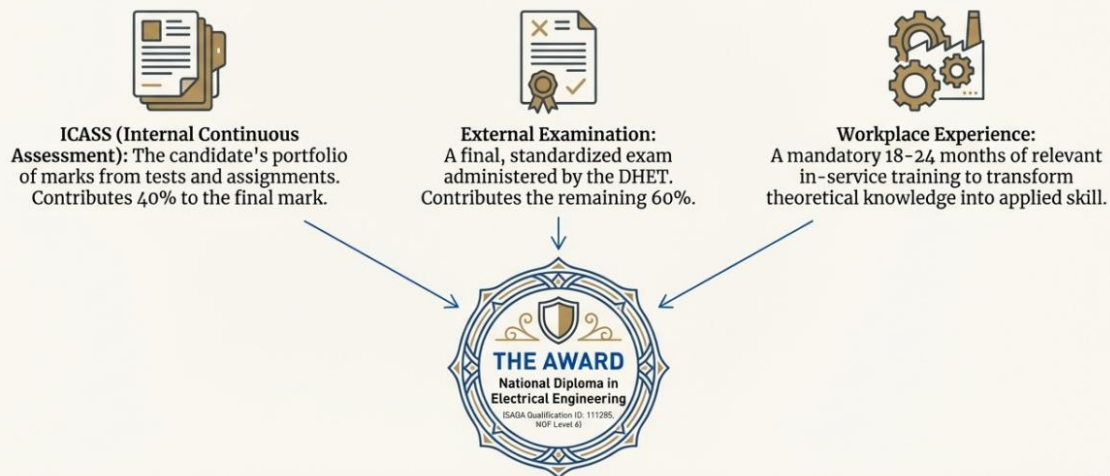


Takeaway: This illustrates the critical importance of administrative diligence in the qualification journey.

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The Synthesis: From Knowledge to Qualification

The final qualification is awarded only after a successful synthesis of theoretical knowledge, continuous assessment, and proven workplace competence.



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The Horizon: Powering the Nation

The National N Diploma is the key to a career in vital industries that form the backbone of South Africa's economy. Qualified engineers are responsible for the generation, transmission, and distribution of electrical power.

Primary Career Destinations

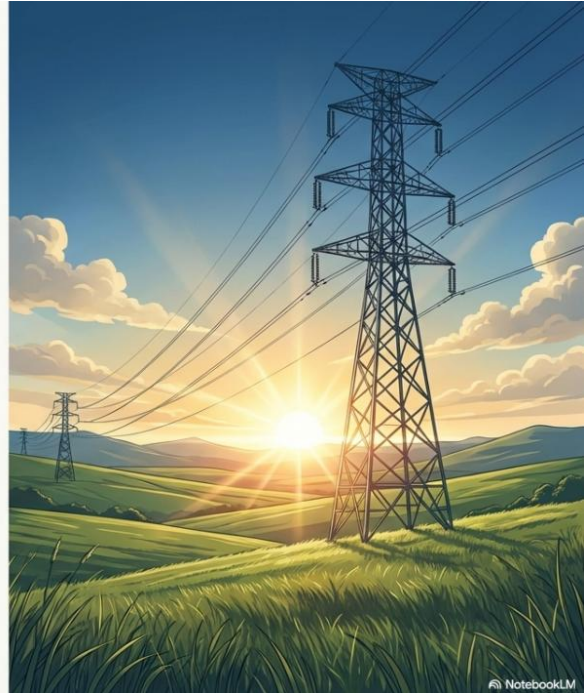


Eskom: The national power utility, responsible for generation and high-voltage transmission.

City Power: The municipal utility for Johannesburg, focused on distribution to homes and businesses.

Typical Roles

- Electrical Engineer
- Technician (Maintenance, Operations)
- Plant Operator
- Artisan Electrician
- Control and Instrumentation Technician



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Beyond the Grid: Engineering for a Modern South Africa

The problem-solving and analytical skills gained on this journey are applicable across a wide range of industries, including advanced technology, public safety, and resource management.

Mining & Industry

Applying electronics and control systems, including nanotechnology for developing advanced gas sensors to improve mine safety.



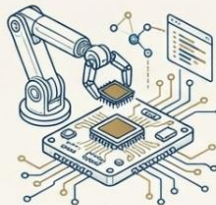
Public Safety & Defence

Specialized technical roles within the South African Police Service (SAPS) and the South African National Defence Force (SANDF).



The 4th Industrial Revolution (4IR)

Skills in electronics and logic systems are a gateway to careers in robotics, coding (Python, C++), IoT, and smart grid development.



Entrepreneurship

The qualification equips individuals with the skills to start their own businesses in areas like CCTV installation or electrical contracting.



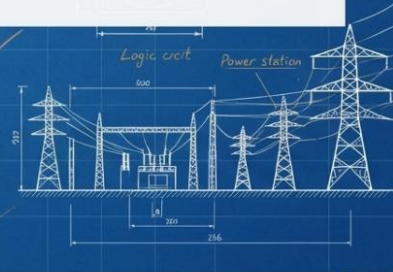
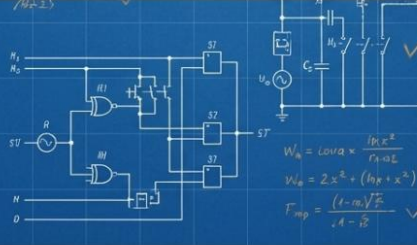
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The Completed Blueprint: A Professional Forged

The Engineer's Odyssey transforms a candidate into a qualified professional. The journey is a rigorous synthesis of:

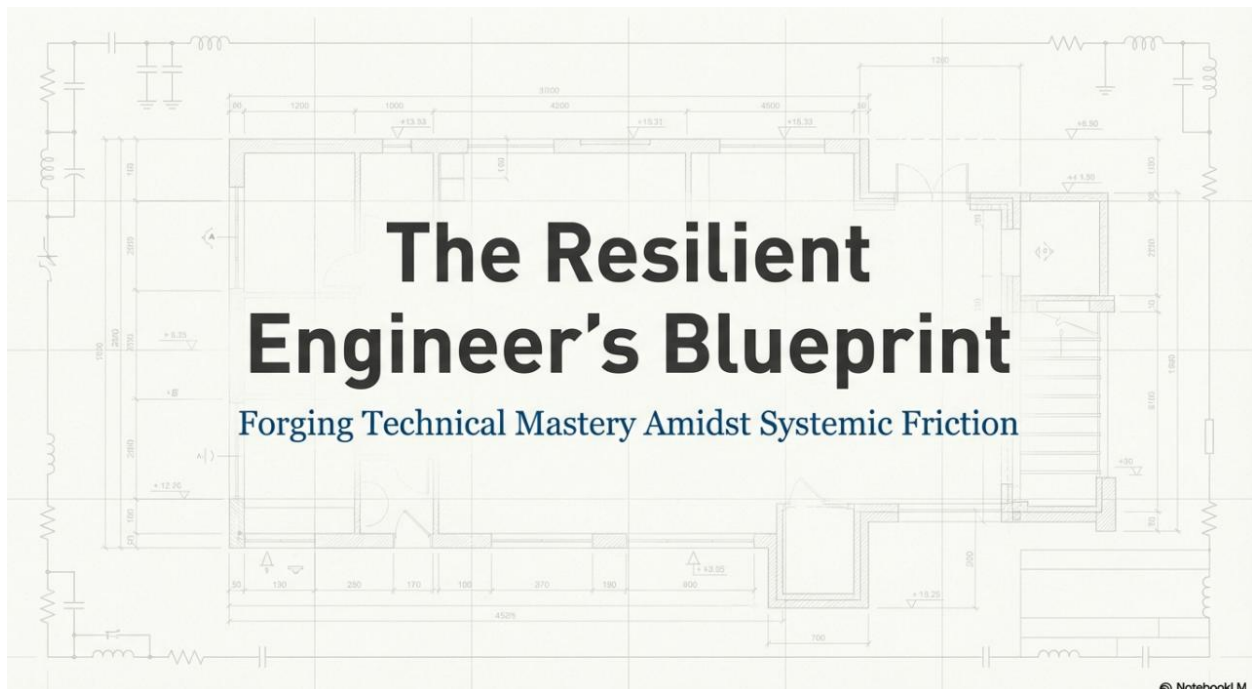
- **Advanced Theory:** The mathematical language to understand and model complex systems.
- **Practical Application:** The hands-on skill to build, maintain, and troubleshoot the nation's infrastructure, mastered through the NATED N1-N6 levels.
- **Regulatory Validation:** The official certification from bodies like SAQA and DHET, confirming a national standard of excellence.

The result is not just a diploma, but a professional ready to design, build, and maintain the future of South Africa.

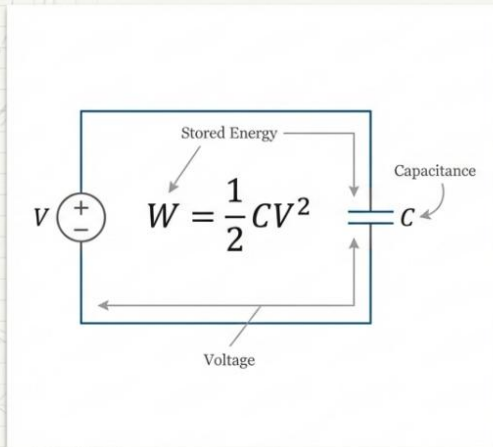


The Resilient Engineer's Blueprint

Forging Technical Mastery Amidst Systemic Friction



A TALE OF TWO WORLDS: THE ENGINEER'S REALITY



The world of elegant logic.

Case Number: GAJB26880-15

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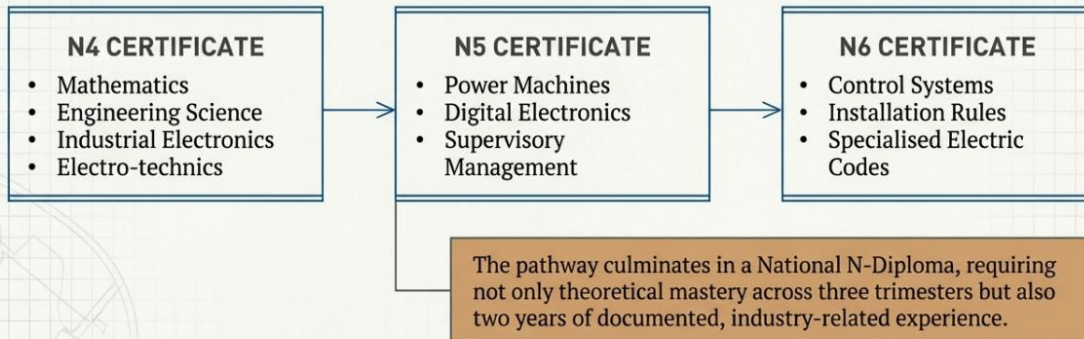
POLICE SERVICE

The world of administrative friction.

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The Promise of Precision: A Foundation in Engineering Principles

The N4-N6 curriculum is designed to build comprehensive theoretical and practical expertise.



NotebookLM

Navigating the Labyrinth: The Reality of the Qualification System

“A system plagued by decades-long certification backlogs and administrative irregularities.”

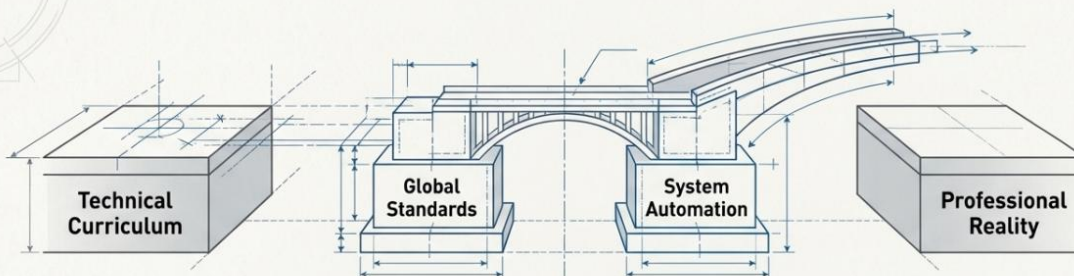
“The lived experience: Unfair dismissal disputes (CCMA), invalidated results, and paused diploma issuance.”

“The core conflict: How does one prove mastery when the system of verification is itself broken?”



NotebookLM

Forging the Toolkit for Resilience



Formal education provides the ‘what,’ but navigating systemic friction requires mastering the ‘how’—the frameworks for reliability, compliance, and efficiency.

1. Mastery of Global Standards (MIL-STD, IEC, IPC)

Adopting the language of mission-critical reliability to build systems that are robust by design.

2. System Automation (VBA, Logic Frameworks)

Creating tools to manage complexity, enforce compliance, and generate verifiable evidence.

NotebookLM

The Grammar of Reliability: Mastering MIL-STD-11991B

A framework for managing Parts, Materials, and Processes (PM&P) in mission-critical systems.



Approved Supplier

Vetted entities with procedures for authenticity and reliability.



Counterfeit Prevention

Strong emphasis on authenticity, authorized suppliers, and Certificates of Conformance (C of C) to mitigate supply chain risk.



Corrosion Prevention & Control (CPC)

A mandatory requirement embedded for long-term sustainment and lifecycle management.



COTS Evaluation

Rigorous criteria for assessing commercial off-the-shelf items before incorporation into military systems.

Key Takeaway: This standard provides the terminology anchors and audit-ready protocols for building truly resilient hardware.

NotebookLM

Engineering for Longevity: The Science of Derating

Derating is the practice of operating components below their maximum rated stress parameters (voltage, current, temperature) to significantly increase reliability and extend service life.

Component Type	Critical Stress Parameter	Derating Factor
Microcircuits (Linear)	Maximum Supply Voltage	0.80 (Operate at ≤80% of max)
EMI Filters	Rated Voltage	0.50 (Operate at ≤50% of max)
Capacitors (Ceramic)	Voltage Derating Factor	0.50 (Operate at ≤50% of max)
Diodes (Rectifier)	Forward Current	0.50 (Operate at ≤50% of max)

This is the difference between a product that simply *works* and a product that *endures* in demanding environments.

NotebookLM

The Force Multiplier: Automating Compliance and Auditing

From Manual Process to Automated Systems

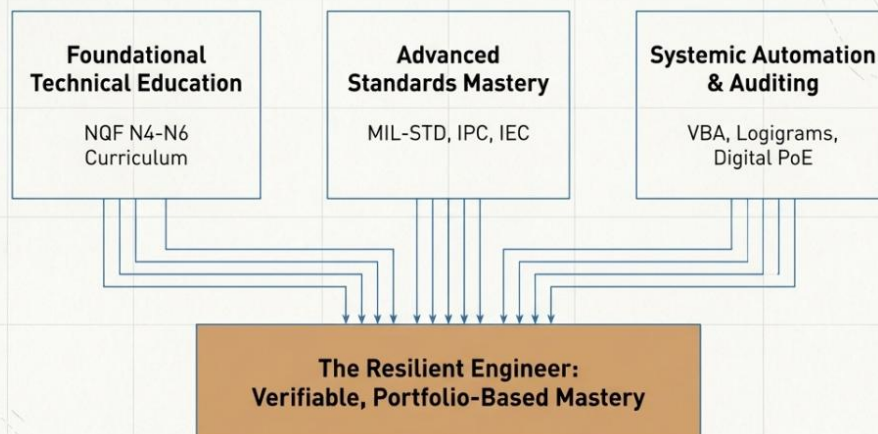
Developed custom tools using Visual Basic for Applications (VBA) to parse complex technical standards, generate audit-ready checklists, and build dynamic competency matrices.

The “So What?”: This approach transforms static documents into active, manageable systems. It automates the process of verification, making deep technical knowledge scalable and repeatable.

```
1 Option Explicit
2 Sub BuildMilStd810AuditChecklist()
3     Dim src As String, lines() As String
4     Dim i As Long, rowOut As Long
5
6     ' Prepare output sheet
7     With Sheet2
8         .Cells.Clear
9         .Range("A1").Value = "Section"
10        .Range("B1").Value = "Focus"
11        .Range("C1").Value = "Test Methods"
12    End With
13
14    ' ... code continues
15 End Sub
```

NotebookLM

The Blueprint: A Unified Framework for Verifiable Competence



This framework integrates formal education with the tools of global industry and the power of automation to create a new model for professional development—one that is resilient to systemic friction.

NotebookLM

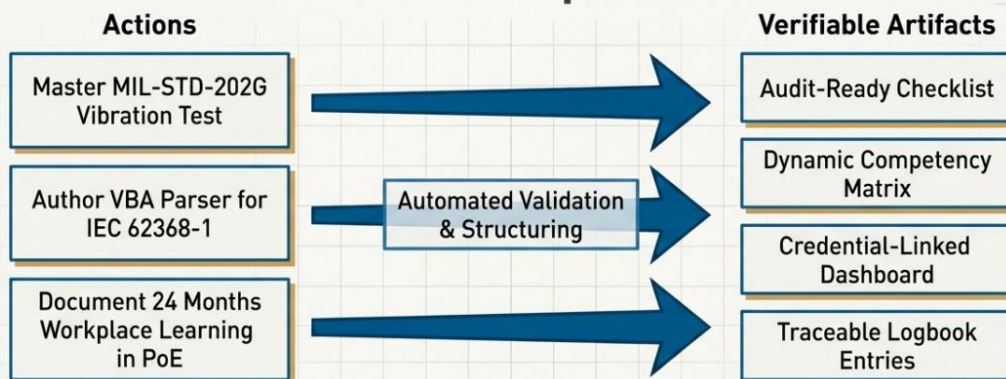
Pillar 1 in Action: Anchoring Curriculum in Global Standards

NATED N4-N6 Subject	Mapped to Real-World Application & Standard
Industrial Electronics	Selecting and derating components per MIL-STD-11991B, Appendix A .
Supervisory Management	Leading technical teams to ensure compliance with IPC-6010 Class 3 fabrication standards.
Control Systems	Designing feedback loops that meet the environmental stress requirements of MIL-STD-810H .
Installation Rules	Applying SANS 10142-1 wiring codes in environments requiring MIL-STD-461 EMC controls.

The curriculum is not just a list of subjects, but the **foundation** for applying world-class engineering practices.

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The Evidence Engine: Generating Verifiable Proof of Competence



This system shifts the burden of proof from a reliance on delayed institutional certificates to a dynamic, self-generated Portfolio of Evidence (PoE). Every skill acquired produces a tangible, auditable artifact.

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A New Archetype: The Resilient Engineer

- 
- **Bilingual:** Fluent in both the language of pristine engineering logic and the navigation of complex administrative systems.
 - **System Builder:** Does not merely follow processes, but designs automated systems to ensure compliance, manage complexity, and prove competence.
 - **Evidence-Driven:** Builds a career on a portfolio of verifiable, artifact-based proof that transcends institutional delay.
 - **Truly Resilient:** Possesses the integrated technical and systemic toolkit to not only survive but thrive amidst friction.

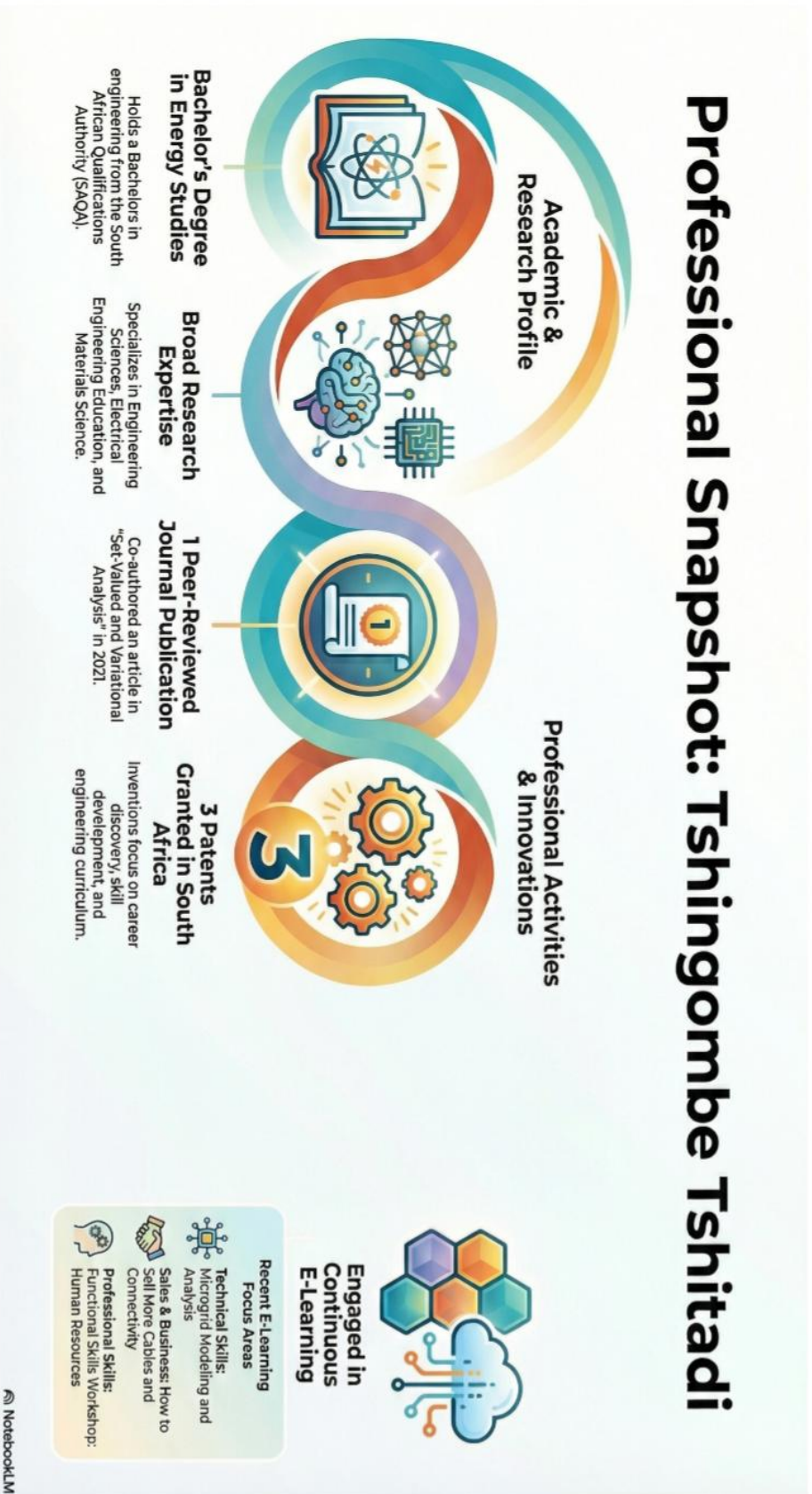
NotebookLM

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Professional Snapshot: Tshingombe Tshitadi



Printout

YOUR PATH TO A NATIONAL N-DIPLOMA IN ELECTRICAL ENGINEERING

STEP 1: ADMISSION & PROGRAM STRUCTURE



3 MONTHS PER LEVEL

A trimester timetable allows students to complete N4, N5, and N6 within one year.



R11,000 PER N-LEVEL

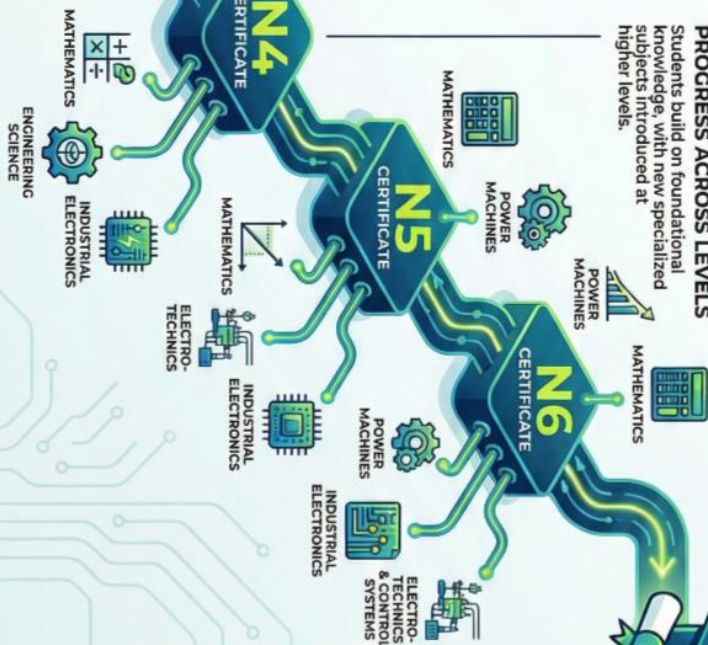
This course fee excludes the cost of textbooks, which are approximately R1500 per trimester.

N4 ENTRY REQUIREMENT: MATRIC WITH MATH & SCIENCE
An N3 pass with mathematics and science is also an acceptable entry path.

STEP 2: THE ACADEMIC JOURNEY (N4 - N6)

CORE SUBJECTS PROGRESS ACROSS LEVELS

Students build on foundational knowledge, with new specialized subjects introduced at higher levels.



STEP 3: QUALIFICATION & CAREER PATH

40% MINIMUM PASS PER SUBJECT

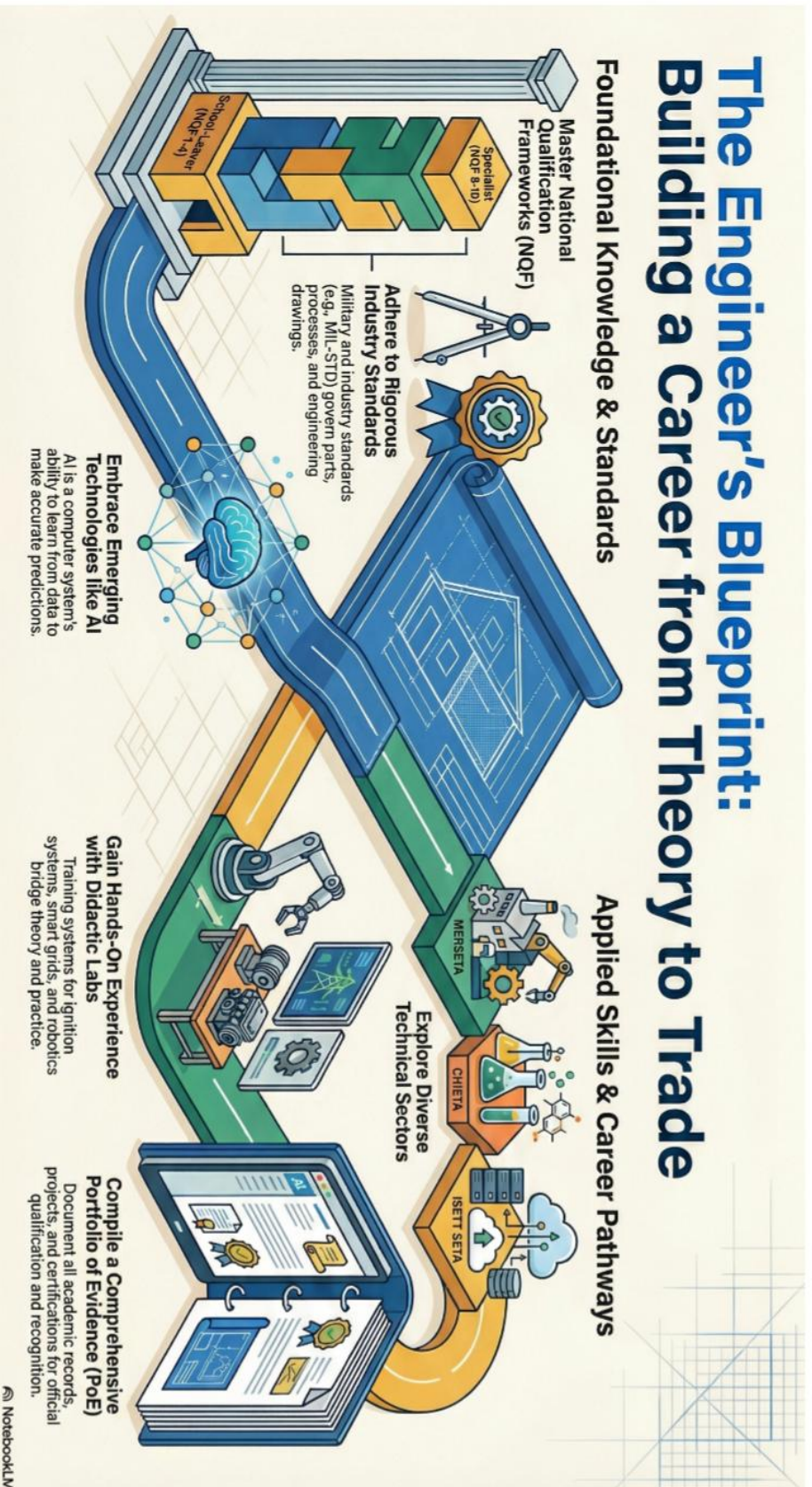
Assessment is based on class tests and a final external examination each trimester.

2 YEARS OF PRACTICAL EXPERIENCE REQUIRED

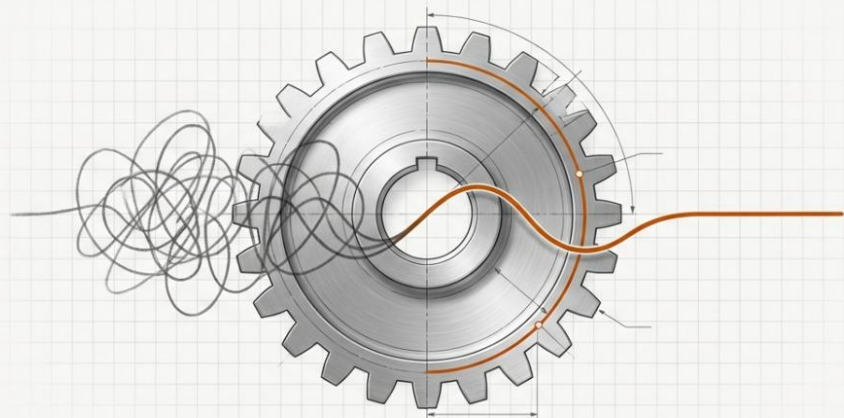
A detailed training report is required to receive the full National N-Diploma.

DIVERSE CAREER OPPORTUNITIES AWAIT
Graduates can work in industrial engineering, process control, and electrical construction.

The Engineer's Blueprint: Building a Career from Theory to Trade



The Resilient Engineer's Blueprint



Forging Technical Mastery Amidst Systemic Friction

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Two Worlds, One Career: The Engineer's Duality

Success in modern technical fields requires navigating a fundamental conflict: the elegant precision of engineering principles versus the unpredictable friction of the systems that govern them. This is a journey of mastering both.

Pristine Technical Mastery

Table IV. Hermetic Microcircuit and Semiconductor Requirements		
Equipment Category	Microcircuit	Semiconductor
A	MIL-PRF-38535 (Class S)	MIL-PRF-19500 (JANS)
B	MIL-PRF-38535 (Class S), MIL-PRF-38534 (Class K)	MIL-PRF-19500 (JANS)
B	MIL-PRF-38535 (Class S, B), MIL-PRF-38534 (Class K, H)	MIL-PRF-19500 (JANS, JANTXV, JANTX)
C	MIL-PRF-38535 (Class S, B), MIL-PRF-38534 (Class K, H)	MIL-PRF-19500 (JANS, JANTXV, JANTX)
D	AEC Q100, MIL-PRF-38535 (Class S, B)	AEC Q101 or MIL-PRF-19500 (JANS, JANTXV, JANTX)
E	AEC Q100, MIL-PRF-38535 (Class S, B)	AEC Q101 or MIL-PRF-19500 (JANS, JANTXV, JANTX, JAN)
T	AEC Q100, MIL-PRF-38535 (application-dependent)	AEC Q101 or MIL-PRF-19500 (application-dependent)

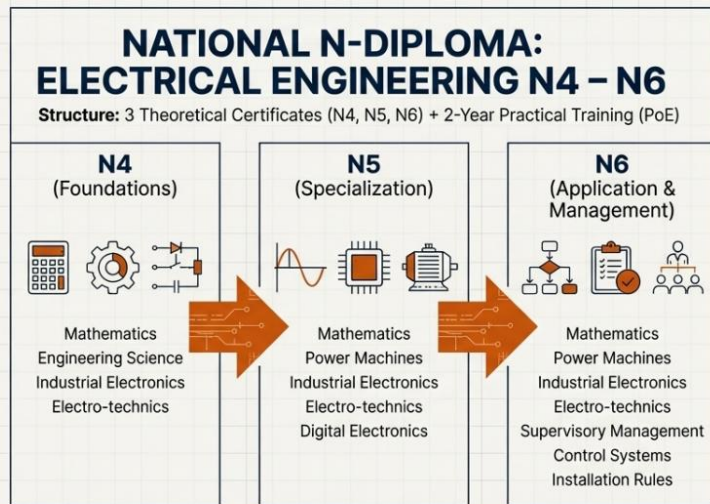
Systemic Bureaucratic Friction



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The Path to Mastery: A Structured Educational Framework

The National N-Diploma in Electrical Engineering provides a clear, progressive pathway from foundational theory to specialized application. The curriculum is designed to build comprehensive expertise, culminating in a qualification recognized at NQF Level 6.



Career Opportunities



Electrical Engineering
& Construction



Process
Control



Industrial Electronic
Engineering

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The Reality of the Maze: Navigating Administrative Hurdles

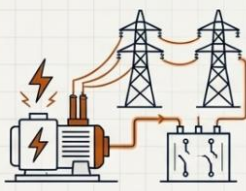
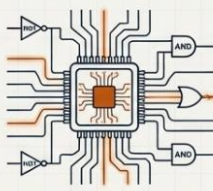
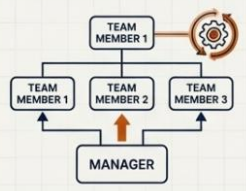
Despite a clear curriculum, the path to certification is often obstructed by systemic challenges. This requires not just technical knowledge, but resilience in the face of administrative backlogs, legal disputes, and institutional friction.



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Building the Toolkit: More Than Just Theory

The N-Diploma curriculum provides the foundational toolkit. Each subject is a competency designed not just for technical execution, but for leading projects, managing systems, and ensuring compliance in high-stakes environments.

	Electro-technics & Power Machines Applied Purpose: <i>*Mastering Energy Systems*:</i> From generation to distribution, understanding the machinery that powers industry.		Industrial & Digital Electronics Applied Purpose: <i>*The Logic of Automation*:</i> Designing and troubleshooting the circuits that form the brains of modern control systems.
	Supervisory Management Applied Purpose: <i>"Leading Technical Teams":</i> The principles of on-site supervision, project management, and workforce organization.		Control Systems & Installation Rules Applied Purpose: <i>"Ensuring Safety and Precision":</i> Applying national standards and automation principles to create reliable, compliant installations.

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The Language of Reliability: Mastering Military-Grade Standards

To build truly resilient systems, one must adopt the frameworks used in the most demanding environments. MIL-STD-11991B provides the definitive standard for managing Parts, Materials, and Processes (PM&P), ensuring reliability, authenticity, and lifecycle integrity from design to sustainment.

Scope

Manages PM&P for all DoD departments, covering development, production, and COTS evaluation.

Core Pillars

Strong focus on counterfeit prevention, corrosion control (CPC), and component obsolescence management.

Application

Ensures that every component, from a microcircuit to a structural bolt, meets stringent performance and reliability criteria across its entire lifecycle.

MIL-STD-11991B: Equipment Categories and Definitions

Category	Definition
A	Continuous use systems. Nonrepairable systems under space environment conditions (e.g., satellites). Must meet radiation hardness requirements.
B	Impulse (single-shot) systems. Equipment exposed to extreme launch/trajectory/return conditions. Nonrepairable once deployed.
C	Aircraft systems. Equipment exposed to turbulence, air temperature/pressure fluctuations, vibration.
D	Ground and sea-based mobile systems. Repairable systems exposed to temperature/humidity fluctuations, vibration, and shock.
E	Stationary ground systems. Repairable systems in controlled environments, readily accessible to maintenance.
T	Targets. Test-specific, non-deployable systems, sometimes exposed to extreme launch conditions.

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Precision in Practice: The Anatomy of a Military Standard

Compliance is not a high-level concept; it is a granular, data-driven discipline. Mastery requires understanding specific derating factors, material properties, and inspection protocols that guarantee performance under stress.

Table AVI. Microcircuit Derating Factors

Critical Stress Parameter	Digital	Linear
Max Supply Voltage	0.90	0.80
Power Dissipation	0.80	0.75
Max Junction Temperature	-40°C	-40°C

Table AI. Capacitor Derating Factors

Type	Voltage Derating Factor
Ceramic	0.50
Tantalum, Solid	0.50
Plastic Film	0.50
Aluminum Electrolytic	Not allowed

Table XXXI. Fungi Susceptibility of Materials

Group I – Fungus-inert materials	Group II – Fungus-nutrient materials
Acrylics	Epoxy resin
Glass	Rubbers (natural/synthetic)
Metals	Polyvinyl chloride (PVC)
Polyamide	Cellulose acetate
Silicone resin	Lubricants

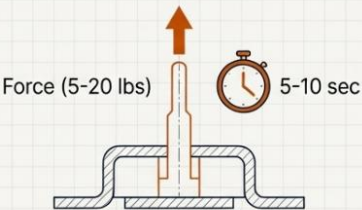
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From Document to Reality: Standardized Environmental Testing

Military standards provide repeatable, verifiable methods for testing component resilience against real-world mechanical and environmental stress, ensuring that systems survive their operational lifecycle.

Method 211A - Terminal Strength Test

Ensures terminals withstand mechanical stresses during installation.

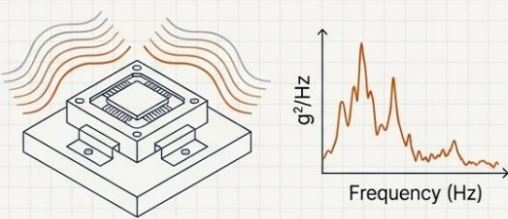


Procedure Example (Condition A - Pull Test)

A specified force is applied along the terminal axis for 5-10 seconds to detect poor workmanship or faulty design.

Method 214A - Random Vibration Test

Determines a component's ability to withstand random vibration common in aircraft and ground vehicles.



Procedure Example (Test Condition I)

Specifies Power Spectral Density (e.g., 0.04 g²/Hz for Condition B) and Overall RMS G (7.56) to be applied in three mutually perpendicular directions.

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Bridging Universes: Integrating Military and Commercial Standards

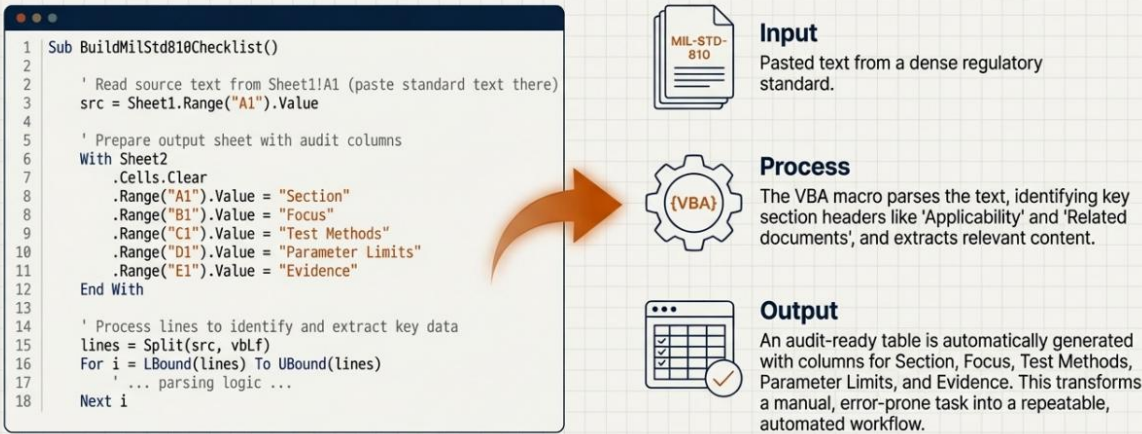
True expertise lies in synthesizing requirements across different regulatory domains. By integrating the rigorous documentation of MIL-STD-100G with the hazard-based safety engineering of IEC 62368-1, a comprehensive framework for designing ruggedized, safe, and globally compliant products emerges.

Dimension	 MIL-STD-100G (Engineering Drawings)	 IEC 62368-1:2024 (Safety Standard)
Safety Focus	Critical Safety Items (CSI) identified on drawings.	Hazard-Based Safety Engineering (HBSE).
Documentation	Prescriptive drawing formats (ASME Y14.100M).	Documentation of hazards, safeguards, and risk assessments.
Change Control	Formal revision blocks and Configuration Management.	Changes affecting safeguards require updated risk assessment.
Qualification	Source control drawings for government approval.	Testing and certification by accredited labs (e.g., CB Scheme).

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The Force Multiplier: Automating Compliance with Code

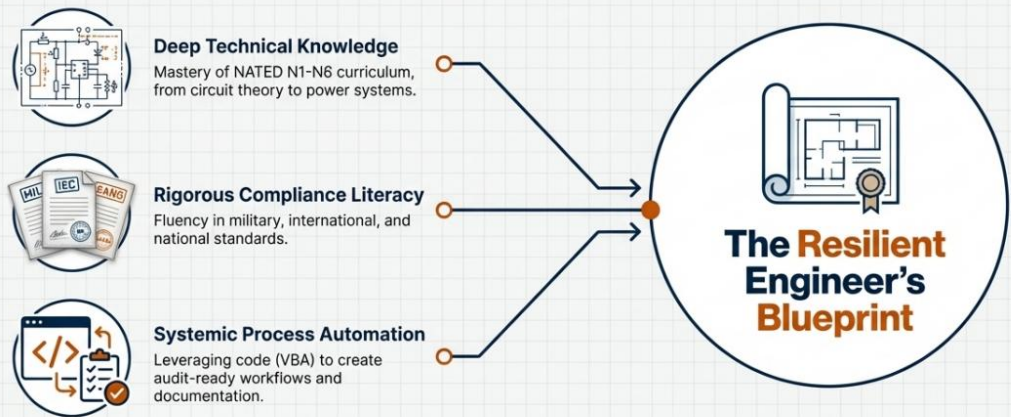
The most effective way to manage systemic complexity is to build better tools. By translating dense regulatory documents into automated routines, the process of creating audit-ready checklists and compliance artifacts can be systemized, ensuring accuracy and saving hundreds of hours.



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The Blueprint: An Integrated Framework for Resilience and Mastery

The solution is not just a collection of skills, but an integrated system. The Resilient Engineer's Blueprint combines three core pillars to create a repeatable model for navigating complex technical and administrative environments.



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Blueprint in Action I: The Competency Matrix

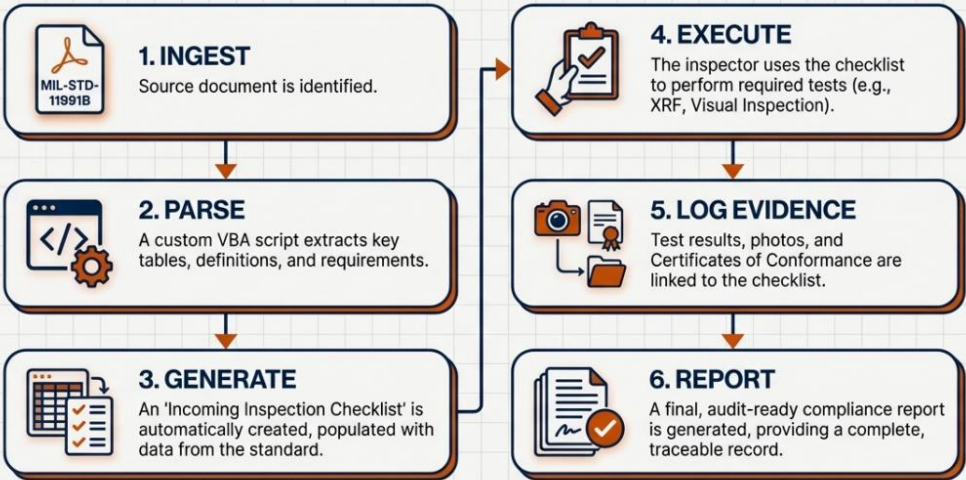
The framework translates academic learning into verifiable, industry-aligned competencies. It explicitly maps NATED curriculum modules to the specific standards and practices required in high-reliability sectors.

NATED N6 Module	Key Concepts	Linked Industry Standard	Verifiable Skill / Artifact
Industrial Electronics	Diodes, Transistors, Rectifiers	MIL-PRF-19500 (Semiconductors)	Ability to select JANTX-level components for a given design
Control Systems	PID Controllers, Feedback Loops	IEC 61508 (Functional Safety)	Design and document a control loop with a specified Safety Integrity Level (SIL)
Power Machines	Transformers, AC/DC Motors	MIL-STD-11991B, App. A	Apply derating factors for motor loads in a power budget calculation
Installation Rules	Earthing, Bonding, Protection	SANS 10142-1:2024	Create a Certificate of Compliance (CoC) for a sample installation

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Blueprint in Action II: The Audit-Ready Workflow

By automating documentation, the Blueprint transforms compliance from a reactive chore into a proactive, manageable system. This logigram illustrates the flow from raw standard to final, auditable report.



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Case Study: From Systemic Logjam to Verifiable Credential

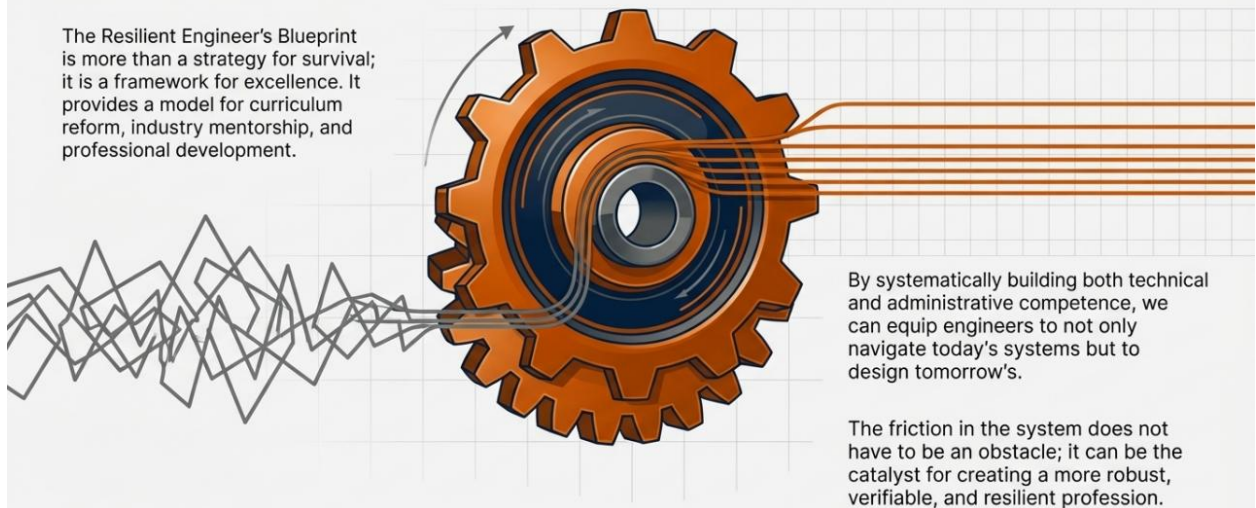
The Blueprint was applied to resolve the persistent challenge of qualification verification. By compiling a comprehensive Portfolio of Evidence (PoE) with audit-ready documentation, cross-referenced standards, and verifiable project artifacts, a clear and undeniable case for certification was presented, successfully navigating the administrative backlog.



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A Replicable Model for a New Generation of Engineers

The Resilient Engineer's Blueprint is more than a strategy for survival; it is a framework for excellence. It provides a model for curriculum reform, industry mentorship, and professional development.



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The Blueprint of a Modern Technologist

A Portfolio of Integrated Expertise: Systems Engineering, Digital Innovation, and Educational Architecture.

Tshingombe Tshitadi Fiston



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A Synthesis of Three Core Pillars

This portfolio demonstrates a unique capability: the ability to connect the unwavering discipline of defense-grade engineering standards with the dynamic potential of modern digital systems, and to architect educational frameworks that build this integrated competence in others.

1. Foundational Rigor

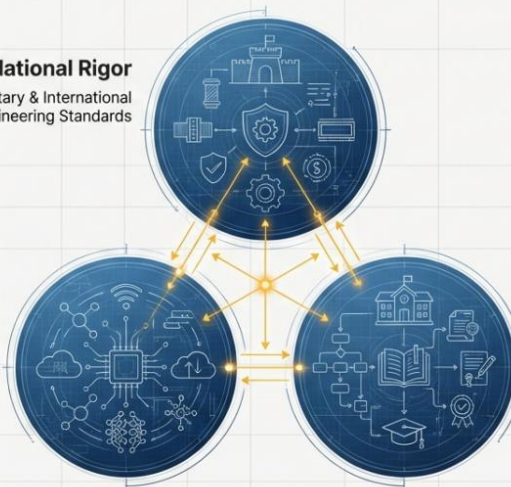
U.S. Military & International Engineering Standards

2. Modern Systems Integration

Smart Grids, IoT, AI & Industry 4.0

3. Educational Architecture

TVET Curriculum, SAQA/NQF Frameworks & Digital Pedagogy

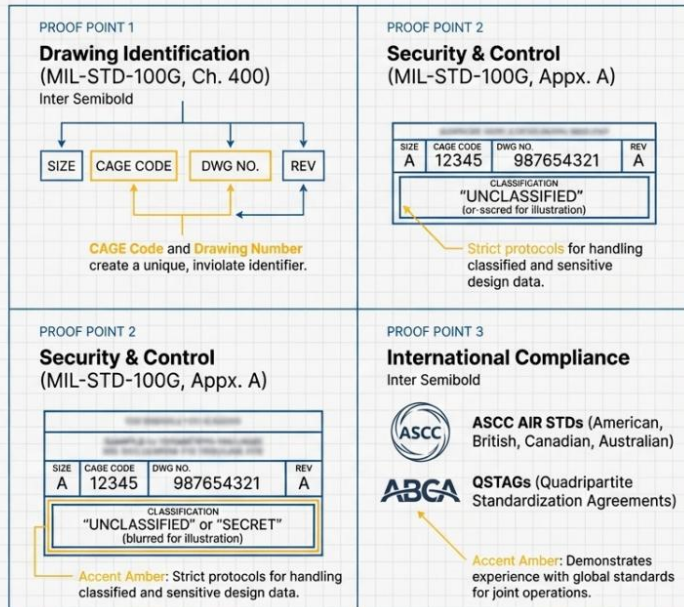


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Pillar I: Grounded in Foundational Engineering Standards

Inter Regular

Mastery of engineering drawing standards (MIL-STD-100G) ensures absolute clarity, interoperability, and configuration management in complex defense and aerospace systems.



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Managing the Lifecycle: Parts, Materials, and Processes

A disciplined approach to Parts, Materials, and Processes (PM&P) management, aligned with MIL-STD-11991B, is critical for ensuring reliability, preventing component failure, and mitigating supply chain risks like counterfeit parts.



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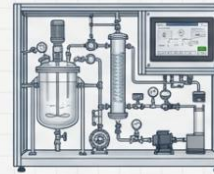
Pillar II: Engineering Modern Systems from Components Up

Translating theoretical standards into practical reality requires hands-on expertise with the core technologies of automation, energy, and process control.



De Lorenzo DL DM91 Ignition System Training Panel

Analysis and diagnostics of six distinct ignition systems, from mechanical to coil-on-plug.



De Lorenzo DL CH12 Combined Chemical Reactor

Studying chemical reactions in stirred tank and tubular reactors with integrated SCADA.



De Lorenzo DL RENLAB Renewable Energies Laboratory

Hands-on training with photovoltaic, wind, and hydrogen fuel cell systems.



De Lorenzo DL 3155A05 Braking Power Control Board

Simulating and diagnosing ABS, ASR, and ESP systems with integrated OBD-II.

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Integrating Intelligence: Smart Grids, IoT, and Industry 4.0

The reliability of today's intelligent systems—from smart factories to national power grids—depends on the seamless integration of hardware, software, and AI, built upon a foundation of rigorously qualified components.

Smart Grid Enhanced with AI (DL SGWD-AI)



- Real-time simulation of power generation, transmission, and distribution.
- AI modules for predictive load management and fault isolation.
- Communication via industrial buses (MODBUS RTU, RS485).

Smart Factory with AI (DL I4.0 FACTORY-AI)



- Cyber-physical systems and IoT-enabled devices.
- Predictive maintenance and real-time data sharing.
- Digital twin concepts and factory automation.

Internet of Things Module (DL NGL-IOT)



- Core hardware: DevIoT unit with STM32F103 microcontroller.
- Protocols: MQTT broker/client integration.
- Applications: Energy, Agriculture, Biomedical, Automotive.

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Pillar III: Architecting the Next Generation of Technologists

Developing future talent requires a strategic understanding of the national qualification ecosystem, ensuring that curricula are aligned with industry needs and provide clear pathways for learner progression.

South African National Qualifications Framework (NQF)		
NQF Level	Qualification	Sector / Outcome
10	Doctoral Degree	Researcher / Academic
9	Master's Degree	Specialist
8	Honours Degree	Professional Engineer
7	Bachelor's Degree	Technologist
6	Diploma / Adv. Cert.	Technician
5	Higher Certificate	Entry-level Technician
1-4	General / National Cert.	Grade 9-12 / School Leaver



SAQA (South African Qualifications Authority): Oversees the development and implementation of the NQF.



QCTO (Quality Council for Trades and Occupations): Manages occupational qualifications.



DHET (Department of Higher Education and Training): The national ministry governing TVET colleges and universities.



UNESCO-UNEVOC: Referenced as a source for international TVET database information, showing global context.

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Designing Sector-Specific Career Pathways

Effective vocational curriculum design identifies scarce skills within key economic sectors and builds structured learning programs—from learnerships to apprenticeships—to fill those gaps.



MERSETA (Manufacturing, Engineering)

- **Trades**
Electrician, Pipe Fitter, Boilermaker, Diesel Mechanic.
- **Training Routes**
N1-N3 Theory → Workplace Learning → Trade Test.
- **Key Document**
Learnership Agreement (Tripartite contract between learner, employer, provider).



CHIETA (Chemical Industries)

- **Scarce Skills**
Chemical Engineering, Instrument Mechanician, Ammunition Fitter.
- **Example Qualification**
National Certificate: Ammunition Fitting.
- **Industry Focus**
Explosives, Pharmaceuticals, Petroleum.



INSETA (Insurance)

- **Career Options**
Underwriter, Actuary, Financial Advisor, Loss Adjustor.
- **Learning Pathway**
NQF Level 4 (Long-Term Insurance) → NQF 5 (Wealth Management) → Regulatory Exams (RE1, RE3).

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Integrating Digital Fluency into Modern Curriculum

To prepare learners for the future, technical education must embed digital literacy at its core. This includes not just using software, but understanding the foundational concepts of AI and Machine Learning.

Visual Evidence



Core Concepts

Program Overview

Partnership with Microsoft to deliver 6 AI certifications covering fundamentals, generative AI, and responsible AI.

Core Concepts Taught

AI vs. Intelligence

Referencing the 'Chinese Room Argument' to distinguish between rule-following and true understanding.

Data as Fuel

Explaining that AI relies on massive, refined datasets to learn and predict.

Types of Machine Learning

- **Supervised:** Learning with a coach
- **Unsupervised:** Learning by observation
- **Reinforcement:** Learning from rewards/penalties

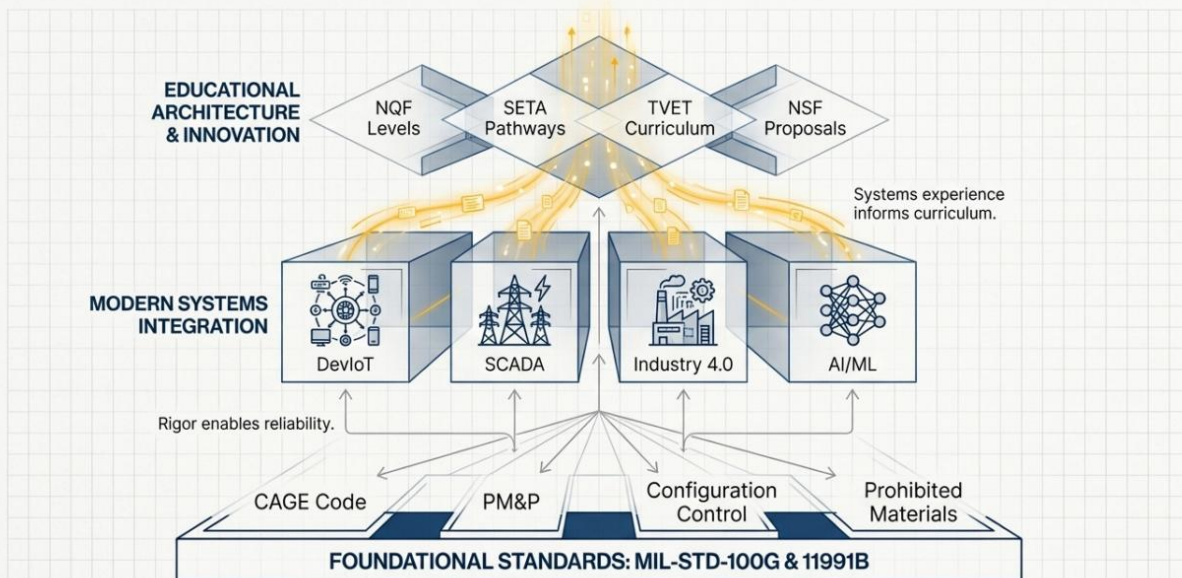
Applying DevOps & Cloud Tools for Project Management

Principle: Modern engineering and curriculum development projects require robust version control, automated pipelines, and cloud-based collaboration tools to manage complexity and ensure quality.



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The Integrated Blueprint: From Standards to Systems to Skills



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A Vision for a National Challenge: An NSF Proposal Framework

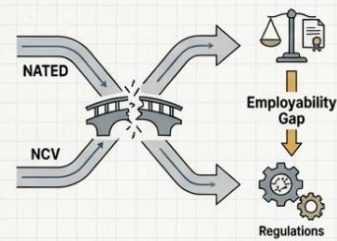
The synthesis of these capabilities culminates in a vision to address a critical national challenge: harmonizing South Africa's vocational education system to meet the demands of the 4th Industrial Revolution.

Project Title

Implementation and Framework for National Qualification and National Trade Examination Curriculum: A Blended Learning Model for TVET in South Africa.

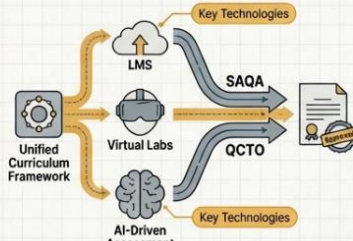
Problem Statement

Disparities between NATED (academic) and NCV (practical) qualifications, outdated trade theory, and policy irregularities hinder learner employability and industry readiness.



Technical Innovation

Develop a unified curriculum framework leveraging an LMS, virtual labs, and AI-driven assessment tools to integrate theoretical knowledge (NATED) with hands-on skills (NCV), aligned with SAQA and QCTO standards.



Broader Impacts

Enhance the pipeline of skilled technicians for strategic sectors (Energy, Manufacturing, ICT), improve national competitiveness, and provide clear, equitable career pathways for TVET learners.



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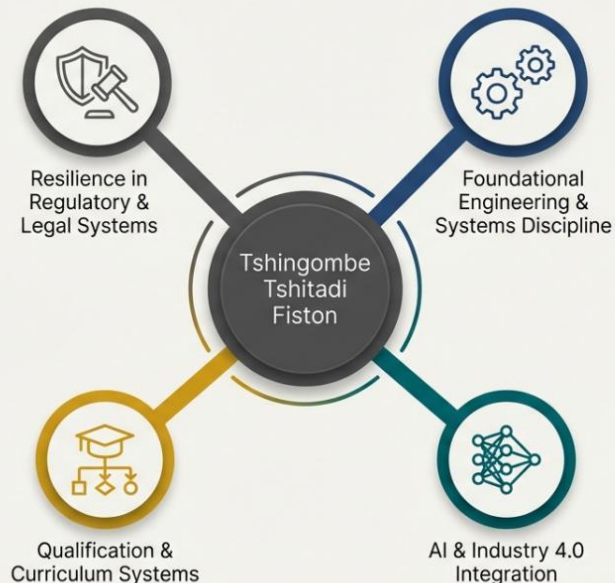
The Systems Integrator: Bridging Engineering, Defense, AI, and Compliance

A Professional Profile of Tshingombe Tshitadi Fiston

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A Unique Nexus of Multidisciplinary Expertise

In a world of hyper-specialization, true innovation comes from those who connect the dots. This profile presents Tshingombe Tshitadi Fiston as a central hub integrating four critical domains. Each area represents a deep well of knowledge and practical application, but his core strength lies at their intersection.



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Foundations in Engineering & Systems Discipline

A Foundation Forged in Precision: Mastering Military-Grade Engineering Standards

A deep understanding of Department of Defense (DoD) standard practices forms the bedrock of a disciplined approach to engineering. This involves mastery over the entire lifecycle of technical documentation, from preparation and revision to numbering, coding, and security classification.

MIL-STD-100G

Engineering Drawings

- **Numbering & Identification:** Expertise in DoD requirements for engineering drawings, associated lists, and product definition data, including CAGE Code, Part or Identifying Number (PIN) structure, and drawing number assignment for unique identification and configuration control.
- **Security Protocols:** Application of security classification markings and notations on drawings and associated lists (Appendix A).
- **Qualification & Sourcing:** Understanding of qualification provisions for source control drawings, ensuring multiple sources of supply and spare part availability (Appendix B).

MIL-STD-11991B

Parts, Materials & Processes

- **Counterfeit Prevention:** Procedures for avoiding, detecting, and containing counterfeit parts and materials.
- **Prohibited Materials:** Awareness of restricted materials (e.g., specific aluminum alloys, cadmium plating, corrosive RTVs) to ensure system reliability.
- **COTS Evaluation:** Criteria for evaluating Commercial Off-The-Shelf items for integration into military systems.

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From Theory to Practice: Applying Systems Thinking to Technical Challenges

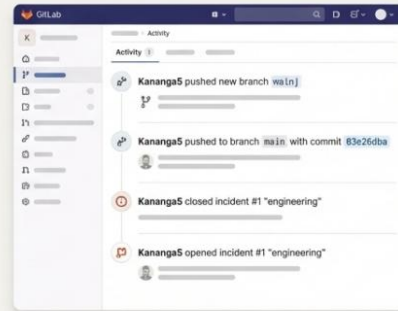
A disciplined foundation is only valuable when applied. This expertise is demonstrated through hands-on work in electrical and electronic systems, a commitment to modern development practices, and the systematic compilation of evidence.

Practical Electrical Engineering

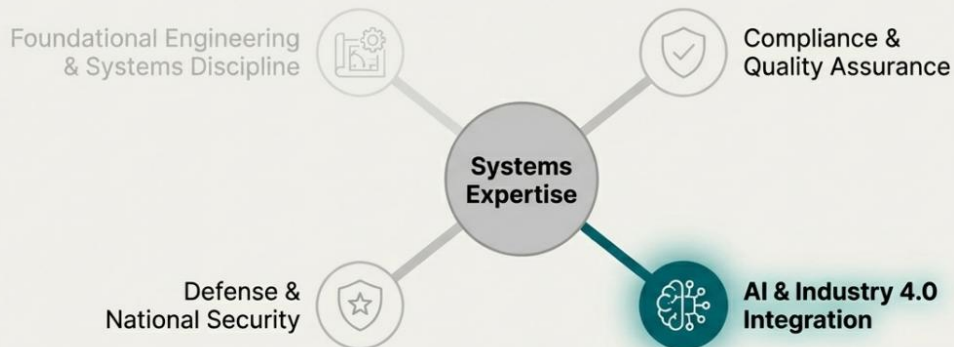
- Comprehensive training in electrician trade theory (NSQF Level 5), covering:
 - Circuit Analysis (Ohm's & Kirchhoff's Laws),
 - Component & System Knowledge (capacitors, 3-phase AC), and
 - Safety & Standards (5S, NEC).

Modern Development Workflow

- Active use of contemporary software development and project management platforms: GitLab for managing an engineering database repository (issue tracking, merge requests, CI/CD) and Azure DevOps for work item tracking and project management.



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Building on a foundation of engineering discipline, the next layer of expertise focuses on integrating the technologies of the future.

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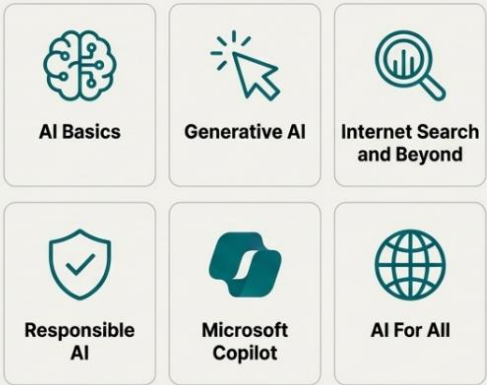
Acquiring the Language of the Future: Fluency in Artificial Intelligence

True integration of AI requires more than buzzwords; it demands a fundamental understanding of its principles, applications, and ethical considerations. This is demonstrated through completion of a comprehensive AI fluency program in partnership with Microsoft and Sci-Bono.

Core Concepts Mastered

- **AI Fundamentals:** Differentiating true AI from simple automation.
- **Knowledge vs. Intelligence:** Understanding the distinction through frameworks like John Searle's 'Chinese Room Argument'.
- **The Role of Data:** Recognizing data as the 'fuel for AI,' essential for pattern recognition, prediction, and learning.
- **Machine Learning Models:** Mastery of Supervised, Unsupervised, and Reinforcement Learning.

Proof Point: 6 AI Certifications (Sci-Bono & Microsoft)



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Implementing Intelligence: From AI-Enhanced Smart Grids to Smart Factories

The value of AI is realized when applied to solve real-world industrial challenges. This is demonstrated through proficiency with advanced didactic laboratories that simulate and test the integration of AI into critical infrastructure and manufacturing processes.

Smart Grid Enhanced with AI (DL SGWD-AI)



Capability

- Combines traditional electrical networks with AI-driven data analytics for predictive load management and fault isolation.

Skills

- Designing intelligent distribution networks, implementing AI algorithms for grid optimization, evaluating cybersecurity via MODBUS RTU and SCADA-WEB platforms.

Smart Factory Enhanced with AI (DL I4.0 FACTORY-AI)



Capability

- Simulates modern manufacturing environments using Cyber-Physical Systems and IoT-enabled devices.

Skills

- Managing smart production lines, using AI for process optimization and predictive maintenance, understanding digital twin concepts.

AI Development Laboratory (DL AI-BASE & DL AI-2.0)



Capability

- A challenge-based learning environment for building and training AI models for industrial applications.

Skills

- Hardware/software integration for AI experimentation in anomaly detection and efficiency improvement.

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Beyond technical application, a systems thinker must also understand and shape the frameworks that develop human capital.

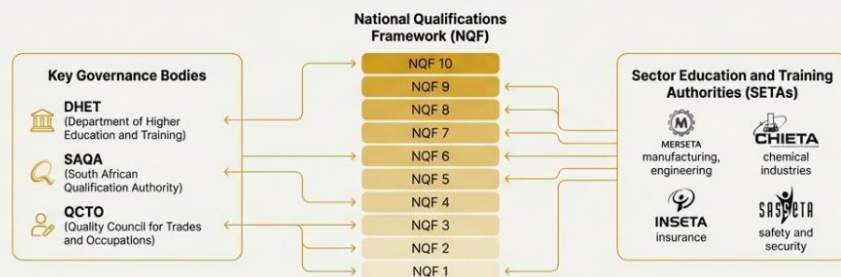
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Qualification & Curriculum Systems

Navigating the National Framework: Expertise in Qualification and Accreditation

Effective technical development requires a holistic understanding of the national ecosystem for education and training. This involves deep familiarity with the qualification frameworks, quality councils, and sectoral authorities that govern skill development in South Africa.

The SA Educational Ecosystem



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Architecting Future Skills: From Curriculum Reform to Research Proposals

True systems integration involves not just navigating existing structures but actively contributing to their evolution. This is demonstrated through formal research proposals aimed at advancing technical education and aligning vocational training with the demands of Industry 4.0.

Initiatives & Research

Thesis Proposal

A research proposal titled "Implementation and framework national qualification and national trade examination curriculum..." aimed at creating a more integrated and effective model for TVET education in South Africa.

NSF Project Pitch (Ref: 00095759)

An Advanced Manufacturing pitch addressing the need for an improved framework for NATED & NCV qualification systems, proposing a new system to resolve backlogs and inefficiencies in the TVET assessment model.

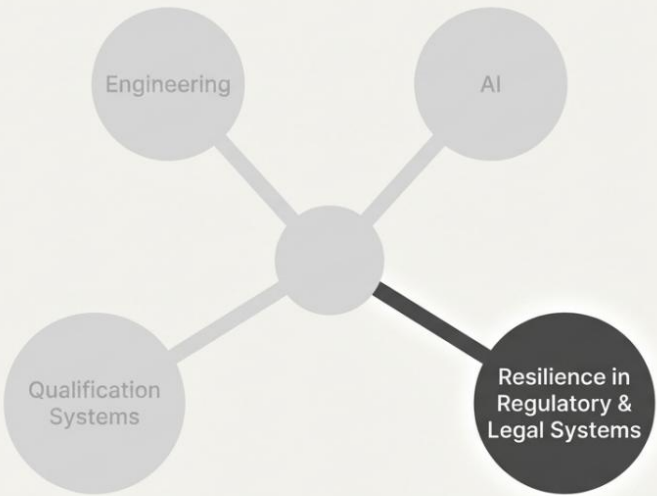
NRF Funding Applications

Active engagement with the national research community through submissions to the National Research Foundation, including applications for Institutional Grants.

My Applications | NRF Connect

Reference	Applied Date	Status
FBIC250410310077	10/04/2025	Application Complete
NFSG250411310257	11/04/2025	Application In Progress
AUPP250414310636	14/04/2025	Application In Progress

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Technical and systemic knowledge must be paired with the **resilience** to navigate the complex, often adversarial, world of legal and regulatory challenges

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Resilience Under Pressure: Navigating Complex Legal and Institutional Challenges

Professional careers are often tested by legal and administrative hurdles. The ability to methodically navigate these challenges is a critical skill, demonstrating perseverance and an understanding of formal procedures.

Case Study: Labour Court Appeal (JR 2461/15)

- **Challenge:** Contesting an unfair dismissal dispute with the CCMA and escalating to the Labour Court.
- **Demonstrated Skills:**
 - **Procedural Navigation:** Successfully filing a referral outside the 30-day limit (requiring a condonation application) and managing the case through multiple stages.
 - **Document Preparation:** Compiling and submitting comprehensive legal filings, including a "Notice of Motion," "Affidavit," "Leave to Appeal," and "Heads of Argument."
 - **Evidence Management:** Systematically organizing a "Pleading Index & Casebook" with meticulous page references for all legal documents, demonstrating high-level administrative competence.

"The applicant has a history of no attendance at hearing and shows a disregard for the court process."
(from Judgement)



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Resilience in Regulatory & Legal Systems

Driving Compliance and Verification: From Foreign Qualifications to Data Protection

Navigating institutional systems extends from legal disputes to qualification verification and modern data compliance. Each interaction is an opportunity to demonstrate meticulousness and a commitment to meeting established standards.

SAQA Foreign Qualification Evaluation



This multi-step process demonstrates persistence in the face of bureaucratic obstacles by systematically addressing feedback to achieve compliance.

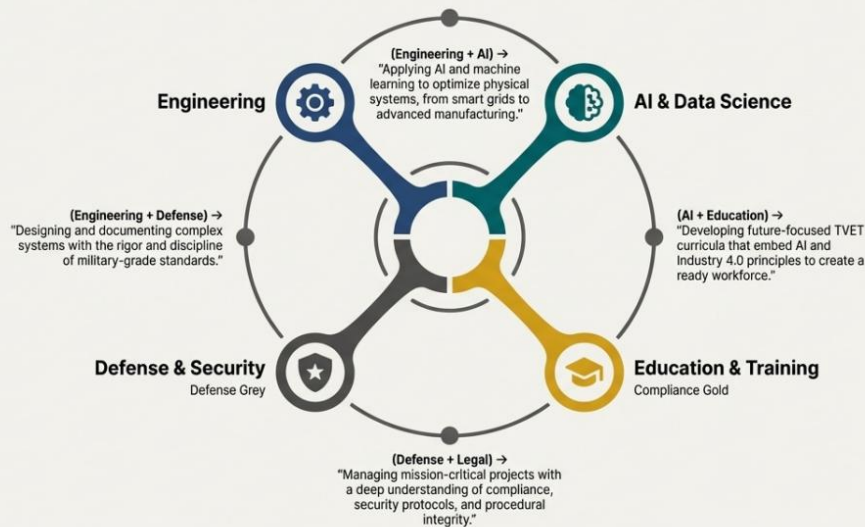
Broader Standards Compliance



Knowledge extends to documentation for professional registration and licensing, complemented by formal training in the Protection of Personal Information Act (Act No. 4 of 2013).

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The Synergistic Advantage: Connecting Domains for Unprecedented Value



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A Systems Integrator Ready for the Next Complex Challenge

A rare professional fluent in the languages of engineering, defense systems, artificial intelligence, and regulatory frameworks. Possesses a proven ability to analyze, navigate, and innovate within complex, multi-layered environments.



Disciplined & Methodical

Grounded in military and engineering standards.



Technically Fluent

Proficient in both traditional engineering and emerging AI technologies.



Systemically Aware

Understands the intricate networks of education, accreditation, and compliance.



Demonstrably Resilient

Proven capacity to overcome significant legal and bureaucratic challenges.

Ready to lead projects at the intersection of technology, compliance, and strategic development.

Email: tshingombefiston@gmail.com
Portfolio: [\[Link to GitLab/Archive.org\]](#)

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The Engineer's Journey: Navigating South Africa's Technical Qualification Framework

The Academic Foundation

Core Curriculum in Electrical Engineering



Electrotechnics

Mathematics

Industrial Electronics

Trade Theory

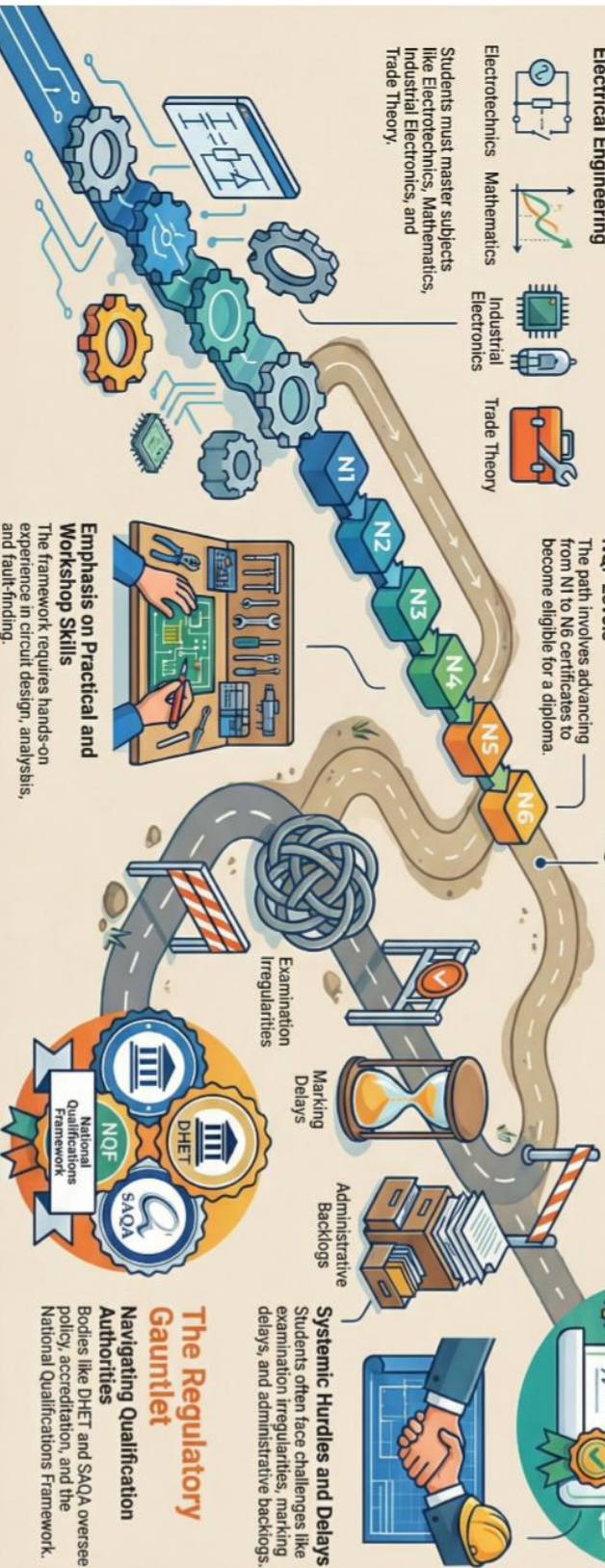
Students must master subjects like Electrotechnics, Mathematics, Industrial Electronics, and Trade Theory.

Progression Through NQF Levels

The path involves advancing from N1 to N6 certificates to become eligible for a diploma.

Diploma Eligible

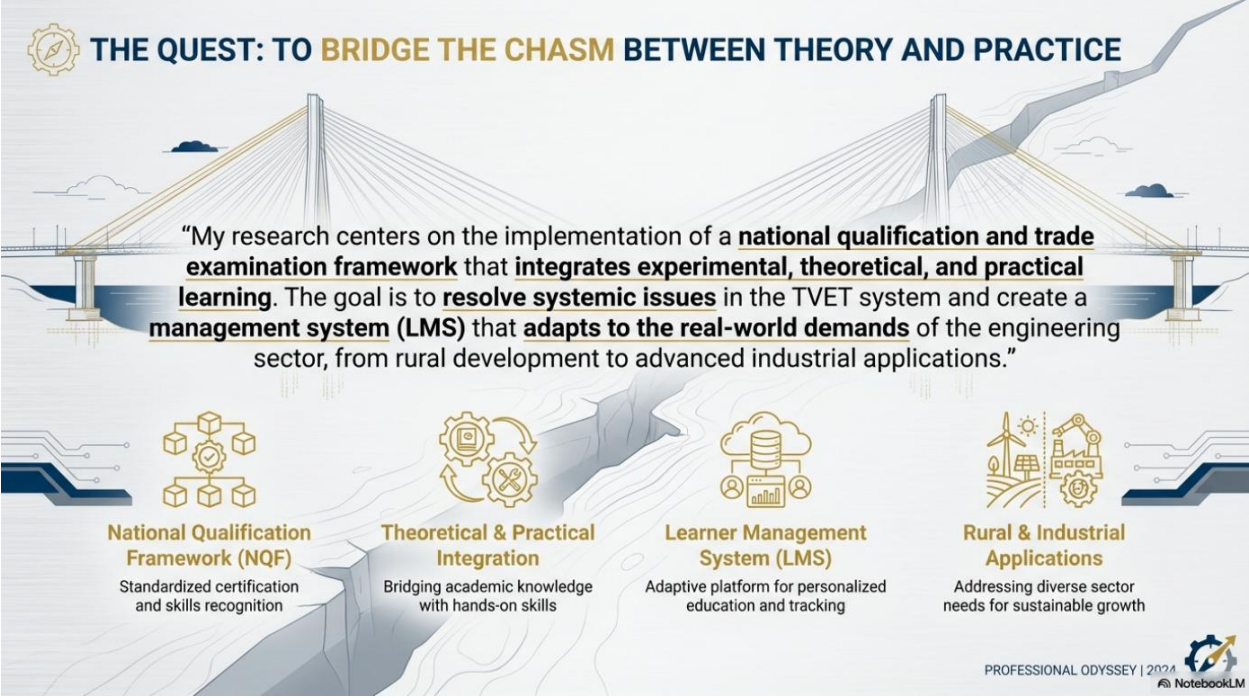
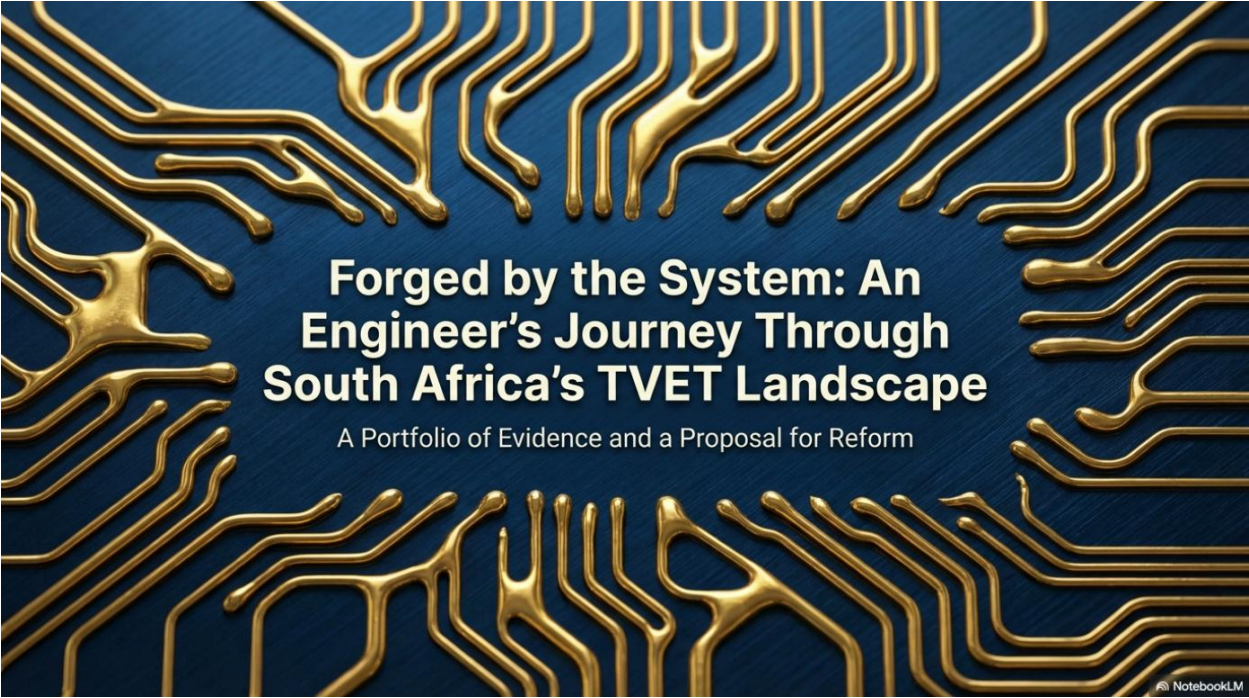
The Final Goal: A National N-Diploma
Combines N4-N6 certificates with relevant, documented work experience for the final award.



Systemic Hurdles and Delays
Students often face challenges like examination irregularities, marking delays, and administrative backlogs.

The Regulatory Gauntlet
Navigating Qualification Authorities
Bodies like DHET and SAQA oversee policy, accreditation, and the National Qualifications Framework.

Emphasis on Practical and Workshop Skills
The framework requires hands-on experience in circuit design, analysis, and fault-finding.



The **First Trial**: Navigating a **Labyrinth** of Bureaucracy



Certification & Accreditation

- Certificate complain back log certificate missing.
- SAQA rejection, missing accreditation, deregistered IDs, lack of framework alignment.
- Challenge n diploma duet vs. saga diplomat vs. anted test council trade.



Assessment & Materials

- Irregularite career material illegal job material.
- Examination irregularite material that final result n4 and new re certificate.
- Assessment policy evidence low.



Systemic Failures

- Printer and system need to make synchronize system.
- **SITA/Umalusi** task team formed to address backlogs since 1992.
- Backlog system , combination system ,printer and system need to make synchronize system deploy generative job framework.

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The Human Cost of Systemic Failure



Professional Rejection

Metropolitan Police

"Based on the information you have shared so far; we regret to inform you that you are not eligible to progress with your application.

Your individual answers suggest that you do not meet the application criteria."



Legal & Regulatory Disputes

Labour Court Cases

JR2461/15, JA17/29

Criminal Case Affidavit

CAS 297/11/2024

Protection Order Application

4702024FCV001046 (Dismissed)

Bargaining Council Complaint

NBCPSS Compliance Order - Levy
Number: LV5090; Amount Due: R87,163.7#

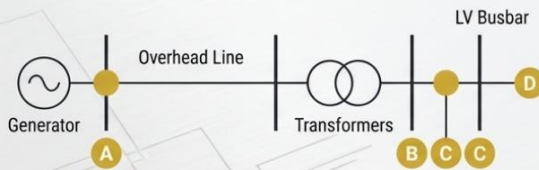
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A System Under Scrutiny: From Personal Struggle to Critical Analysis

- **Inconsistent Regulation:** Discrepancies in how vocational education is governed, leading to unequal standards.
- **Unstandardized Assessments:** Lack of uniform evaluation methods creates an unfair and unreliable system.
- **Unequal Access to Resources:** Significant gaps in infrastructure, especially between urban and rural colleges.
- **Rural & College Time-Table Discrepancies:** Scheduling conflicts and limited lecturer availability create delays in rural education delivery.
- **Framework Mismatch:** The national framework (NQF) often fails to align with the local needs of institutions and industry requirements.

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Mastery Forged in Practice: Power System Fault Analysis



Introduction:

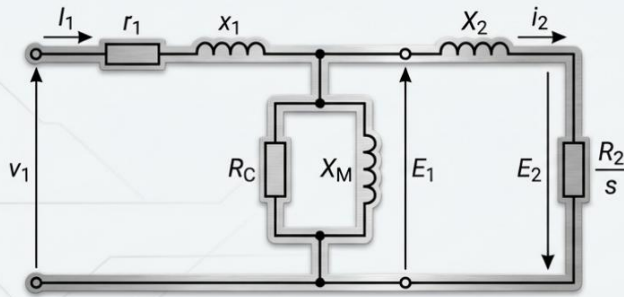
Problem: Consider a 20kv network supplying an HV/LV substation. The isc_{3a} d up value must be calculated at various fault locations (Points A, B, C, D) in the network.

Section	Calculation	Result
Overhead Line	$X_{Co} = 0,4 \times 2$	$X = 0,8 \Omega$
	$R_{Co} = 0,018 \times 2000 \div 50$	$R = 0,15 \Omega$
Transformer	$Z_t = 1/2 \times 5/100 \times 410 \exp 2/19 \exp$	$X_T = 9,2 \text{ m}\Omega$, $R_t = 9,2 \text{ m}\Omega$
Fault at B (LV)	$X_B = [(X_A \cdot 0,42) + 4,2 + 0,15 + 15] \times 10 \exp -3$	$X_B = 6,51 \text{ m}\Omega$
	$R_B = [(R_A \cdot 0,42) + (0,84 + 0,57) \times 10 \cdot \exp -3]$	$R_B = 1,77 \text{ m}\Omega$

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Deconstructing the Machine: Three-Phase Induction Motor Analysis

Analysis of a 15 HP, 60Hz, 2-pole induction motor.



Key Calculations:

- **Synchronous Speed (Ns):**
 $N_s = 60/2 = 30 \times 60 = 1800 \text{ r/Min}$
- **Slip (s):**
 $s = (1809 - 1710) / 1800 = 0,05$
- **Air Gap Power (Pag):**
 $P_{ag} = 12,010 / (1 - 0,05) = 12,642 \text{ W}$
- **Rotor Copper Loss (Pcu):**
 $P_{cu} = 0,05 \times 12642,1 = 632,1 \text{ W}$
- **Leakage Reactance (60Hz):**
 $X_L = (60/15) (x'_1 + x'_2) = 1,616 \Omega$
- **Magnetic Reactance (XM):**
 $X_M = X_{n1} - x_1 = 20.44 - 0,485 = 19,955 \Omega$

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Advanced Principles: Synchronous Machines and Generator Efficiency

1. Transient & Subtransient Analysis

- **Per Unit Transient Inductance (Lq):**
 $L_q = L_{aw} \cdot L_{kq} / (L_{aw} + L_{kq}) + L_1 = (1,72) + 0,08 / (1,72 + 0,07) - 0,12 = 0,195 \text{ Pu}$
- **Field Open Circuit Time Constant (T'd):**
 $T'd = L_{ffd} / I_{fd} = 1,74 / (6,23 \times 10^{-4}) = 2793 \text{ Pu}$
- **Subtransient Short Circuit Time Constant (T''oO):**
 $1 / F \cdot k_d \times [L_n / (1 + (1/L_{ad}) + (1/L_{fd}) + (1/L_1))] = 16.9 \text{ Pu}$

2. Generator Performance & Efficiency

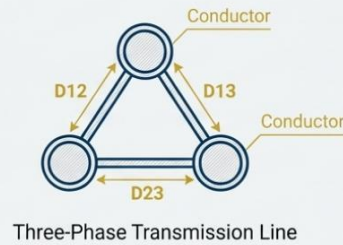
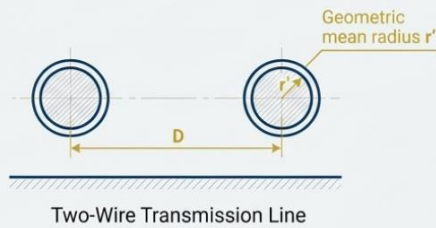
- **Rated Load Angle (δ):**
 $\delta = \tan^{-1} \cdot \exp^{-1} \cdot [(1.8)(0.80)(1.0) / [(1.0)(1.89)(0.6) + 1]] = 35^\circ$
- **Synchronising Power Coefficient (Pr):**
 $P_r = (75)(1000) / (2\pi \times 360) = 122,780 \text{ kW/rad}$
- **Core Loss Calculation:**
 $S_o = 1.175 \times p.u., \text{ loss } 21000 \text{ kw}$

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From Source to Grid: Transmission Network Design

Analysis of a 10-mile, two-wire transmission line with a conductor spacing of 8 ft.



Key Calculations Displayed:

Geometric Mean Radius (GMR):

$$r' = 0,7788(2,54 \times 10 \times 10^{-3}) = 0,0019780 \text{ m}$$

Total Inductance (LT):

$$LT = (4 \times 10^{-7}) \ln(D/r') = 28,5 \times 10^{-7} \text{ H/m}$$

Roboto Bold:

$$LT = (4 \times 10^{-7}) \ln(D/r') = \text{H/m}$$

Inductive Reactance (XL):

$$XL = (377)(28,5 \times 10^{-7}) = 0,64 \Omega \text{ (for 1600m)}$$

Average 3-Phase Inductance (Lavg):

$$L_{avg} = (L1 + L2 + L3)/3 \text{ H/m}$$

Core Formula:

$$L_{dlux} = (2 \times 10^{-7}) \ln(D12, D13, D23, \exp^{1/3} r'), \text{H/n}$$

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A Systems Perspective: From Cogeneration Efficiency to Lighting Design

Part 1: Industrial Cogeneration Plant Analysis

Cogeneration plant cycle based on turbine as the primary expression.

$$\text{efficiency} = (P + H) \div Q_{1,plan}$$

	Full Load (MW)	Heat Rate (Btu/kWh)	Fuel Price (\$/MBtu)	Incremental Fuel Cost (\$/MWh)
Unit A	50	12,000	1.50	18.00
Unit B	35	12,500	2.09	25.00
Unit C	16	13,500	1.50	19.00

Part 2: Practical Lighting System Design

Lighting system design for a metal working shop area of 12m x 60m.

Principle: Determine utilisation factor. Area = 2 x mounting height (20m) x 4 x mounting height (40m).

Illumination standards:

- Public Space: **30 lx**
- Simple Orientation: **50 lx**
- Working Space (Simple Visual): **100 lx**

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The Vision: An Integrated Framework for TVET Reform

The Goal

Enhance industry readiness and workplace skills by addressing policy inconsistencies, improving management systems, and ensuring strong work-based learning components."



The Method

Introduce experimental frameworks to ensure both theoretical knowledge and practical skills are addressed. Implement real-world case studies, hands-on training, and industry feedback mechanisms to ensure the combination of theoretical and practical education is balanced."

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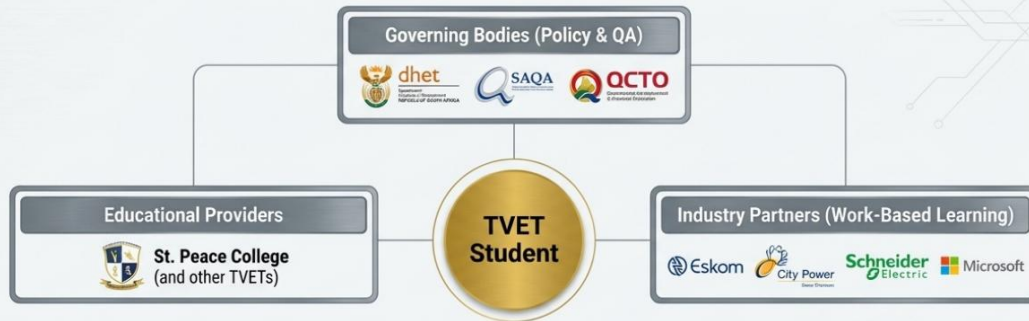
A Blueprint for Change: Addressing Core Challenges

The Problem	The Proposed Solution
Assessment Delays & Inconsistencies: Certificate backlogs, unstandardized marking, and slow feedback loops hinder student progression.	Automated & Digital Systems: Implement digital tools for automated marking, real-time progress tracking, and efficient reporting of learning outcomes.
Rural & Resource Disparities: Limited access to infrastructure, skilled educators, and relevant timetables in rural colleges.	Scalable & Cost-Effective Solutions: Develop frameworks that can be applied in resource-constrained settings, ensuring equitable access to advanced educational technology.
Industry-Academia Misalignment: Industry-Academia Misalignment: A persistent gap between NQF standards, college curricula, and the practical skills required by employers.	Integrated Curriculum Design: Integrated Curriculum Design: Integrate industry requirements directly into vocational education, ensuring learners gain industry-ready skills through project-based learning and apprenticeships.

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A New Ecosystem for Engineering Education



Key Components of the New Curriculum

- **Work-Integrated Learning (WIL):** Mandatory internships and on-the-job training linking theory with real-world settings.
- **Project-Based Learning & Research:** Focus on advanced engineering research in areas like circuit design, automation, and industrial systems.
- **Competency-Based Assessment:** Move beyond simple theoretical exams to practical, hands-on evaluations and peer assessments.
- **Continuous Professional Development (CPD):** A requirement for both lecturers and students to stay aligned with industry evolution.

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The Engineer's Portfolio: A Testament to Resilience and Expertise



Formal Qualifications

- **National N Diploma:** Engineering Studies (Electrical) N1-N6
- **Trade Certifications:** Panel Wiring Electrical, Trade Theory (N4/N5/N6)
- **Accrediting Bodies:** DHET, SAQA, QCTO, CHIETA



Practical Experience & Training

- **Workplace Training:** City Power, St Peace College
- **Industry-Specific Training:** Schneider Electric (PLC, EcoStruxure, Motor Control), Eaton Electrical



Digital & Cybersecurity Credentials

- **Microsoft:** Azure Data Engineering, Azure Synapse, Microsoft Defender (MCID: 99587175)
- **(ISC)²:** Candidate Certificate in Cybersecurity (ID: 6743edd3...)
- **BrightTalk:** Certificates of Attendance (Next-Gen SASE, Ransomware Attacks)



Research & Public Engagement

- **Thesis Proposal:** "Implementation and framework national qualification and national trade examination curriculum..."
- **Public Archives:** Portfolio documents published on Internet Archive (Creator: Tshingombe)
- **Global TVET Forum:** Contributions to UNESCO-UNEVOC on qualification frameworks and experimental learning.

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Roboto Regular (#6C757D)

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“This body of work is more than a collection of certificates and calculations. It is the outcome of a journey through a challenging system—proof of **expertise forged, not just taught. It is the foundation for building a more **resilient and equitable future** for engineering in South Africa.”**

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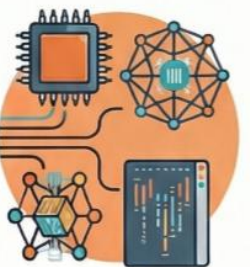
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A Profile in Engineering & Applied Technology

CORE COMPETENCIES & EXPERIENCE



Hands-On Experimental Engineering
Experience with semiconductors, thermodynamics, transformers, power electronics, and fault analysis.



Advanced Theoretical Foundations
Expertise in mathematics, computer science, industrial electrician competencies, and curriculum design.



Diverse Research & Development Interests
Spanning renewable energy, smart grids, AI, robotics, and wireless communications.

PROFESSIONAL ENDEAVORS & RECOGNITION



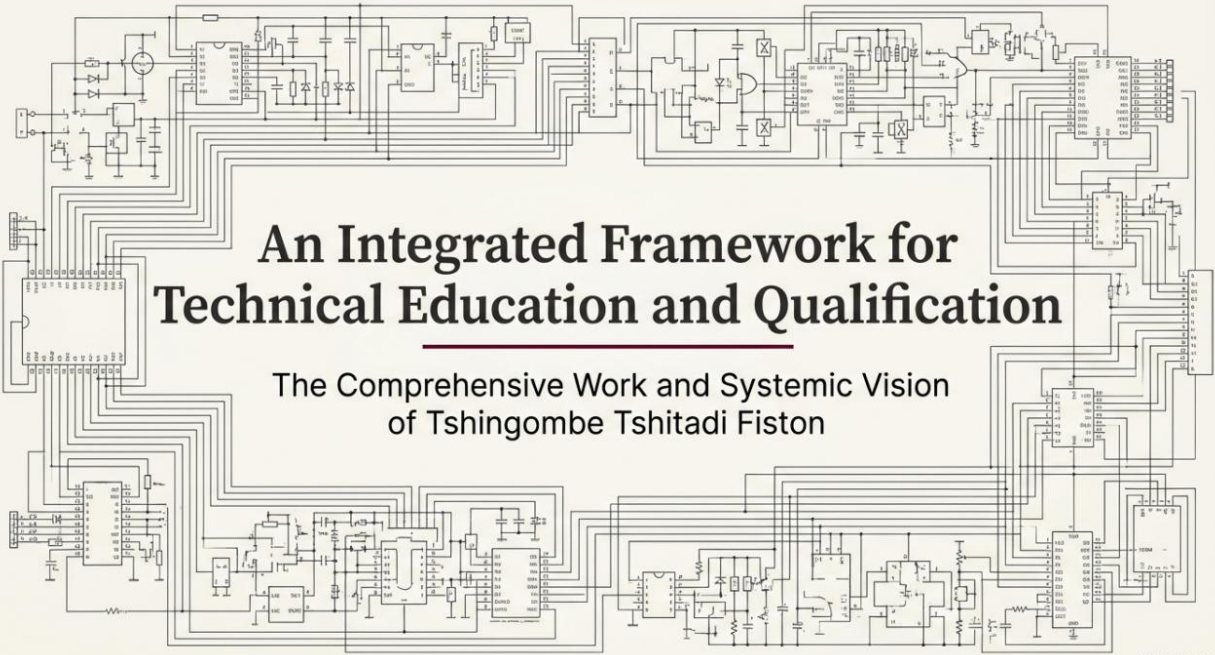
Pursuing Multi-Level Qualifications
Activities range from NI-N6 diplomas to Masters/Doctoral research and CPD certificates.



Seeking Research Funding & Publication
Submitted multiple project proposals to bodies like the NSF and research papers to journals.



Engaging with Regulatory Bodies
Actively working with SAQA, DHET, and QCTO to validate qualifications and resolve irregularities.



An Integrated Framework for Technical Education and Qualification

The Comprehensive Work and Systemic Vision
of Tshingombe Tshitadi Fiston

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A Master Practitioner's Portfolio Reveals a Systemic Gap in Qualification Frameworks



- Tshingombe Tshitadi Fiston has produced an extensive and meticulously documented body of work spanning experimental electrical engineering, theoretical computer science, and technical curriculum design.
- This portfolio, while demonstrating profound expertise, has met with consistent systemic barriers to recognition from accreditation bodies, grant institutions, and employers.
- This presentation makes the case that this disconnect points not to a lack of individual qualification, but to a critical need for a modernized framework that can validate deep, practice-based experience.
- We will present the evidence of expertise, diagnose the systemic “irregularity,” and outline a forward-looking, integrated solution.

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A Portfolio of Practice: Four Core Domains of Expertise

	Experimental Engineering & Technical Practice • Semiconductor Band Gap Analysis • Transformer Verification • DC/DC Power Electronics • Generator Protection & Fault Analysis • Smart Grid Performance Testing • Renewable Energy Integration		Mathematics & Computer Science Foundations • Mathematical Proof Techniques (Axiomatic, Induction) • Modular Arithmetic & RSA Encryption • Graph Theory & Network Routing • State Machines & The Halting Problem
	Industrial Electrician Competencies • Circuit Design & Amperage Calculation • Wiring Methods & Code Compliance (SANS 10142-1) • Occupational Skill Blocks • Smoke Alarm Installation Standards		Technical Education & Curriculum Design • TVET Curriculum Module Development • Didactic Methods (ADDIE model) • LMS Integration (Blackboard, Google Classroom) • Outcome-Based Education & Assessment Reliability

Data Point: Documented in a comprehensive portfolio of over 110 pages, covering qualifications from N1–N6 to the National N Diploma and beyond.

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From Logic Gates to Power Grids: A Record of Documented Experimentation

Power & Network Systems



- **Network Energy Consumption:** “Measured the correlation between network traffic and power usage in Cisco networking hardware to evaluate energy-saving features.”
- **Smart Grid Optimization:** “Investigated the role of Cisco devices in improving fault detection and load management in smart grids.”
- **Renewable Energy Integration:** “Configured Cisco hardware to monitor and control systems with renewable energy sources like solar panels, analyzing efficiency in hybrid setups.”

Foundational Electronics: Task 4: AND Gate Verification Using IC 7408



A	B	Voltage A	Voltage B	Output Y	LED Status
0	0	0V	0V	0	OFF
0	1	0V	5V	0	OFF
1	0	5V	0V	0	OFF
1	1	5V	5V	1	ON

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A Consistent Record of Scholarly Inquiry and Publication

Peer-Reviewed Publications



- project career master job engineering thesis... Paper Accepted in IJETR
- Case Report: research and project master energy rural career... Paper Accepted in IJETR
- project engineering Career Discovery and Mentoring Framework... Paper Accepted in IJETR

Digital Portfolio & Projects



- project engineering thesis master
- thesis master rural



- Portofolio Career, Research College
- engineering, business studie

Extensive Research Topics

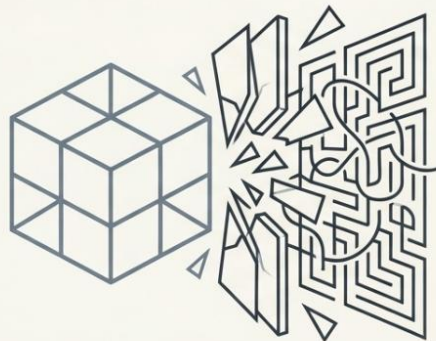


Artificial General Intelligence (AGI), Robotic Process Automation (RPA), Electrochemical Engineering, Advanced Wireless Communications, Energy Storage & Battery Technology, Cybersecurity in Electrical Systems

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A Mountain of Evidence Confronts a System of Irregularities

Despite a vast and meticulously documented portfolio, a pattern of systemic rejection emerges. This pattern points not to a lack of qualification, but to a framework misaligned with recognizing and validating deep, practice-based expertise.



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A Documented Pattern of Systemic Rejection

National Science Foundation (NSF) I-Corps Program (August 2025)

DECLINED (P-10307)

"This application has been declined. The applicant does not meet the eligibility requirements. To be eligible, the core technology needs to have been developed at an accredited institution of higher education and the proposal must be submitted from an institution of higher education."
- Ruth Shuman, Program Director, NSF

Atlantic International University (February-March 2025)

REJECTED (Multiple Submissions, e.g., P-09948)

Multiple thesis and research proposals on topics including skill development, electrical trade policy, and education technology were rejected.

F1000Research (February 2025)

FILES CLOSED (Submission 161981)

"Thank you for your submission to F1000Research. We do not publish theses and we are closing our files."

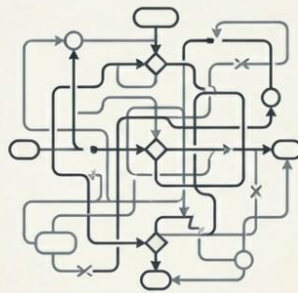
SAQA/ DHET Correspondence

Cites ongoing "irregularities," "backlog system," and challenges with the validation of N1-N6 qualifications and the final issuance of the National N Diploma.

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The Expert's Diagnosis: An "Irregularity System"

On Education Policy:
"additional information
irregularity system need
to make reason quotation of
job learner lecture
agreement... no to
monopolies education system
but democratic liberalism of
certain factor in examination
criterial of course
private system industrial."



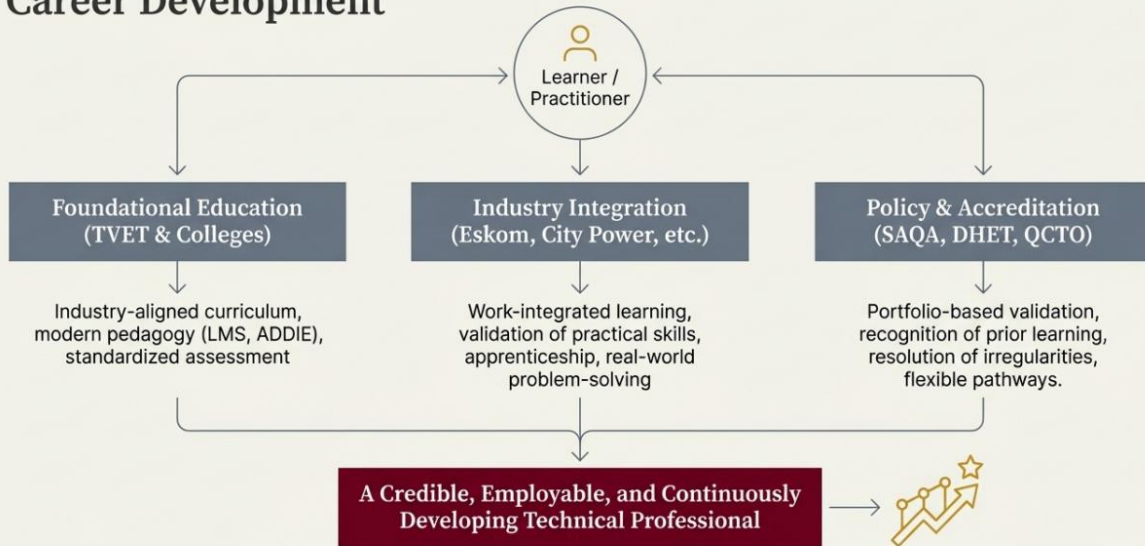
On Curriculum: "research
topics circulum regulation
irregularity material script."

On Systemic Inefficiencies: "backlog system,
combination system, printer and system need to make
synchronise system deploy generative job framework."

The analysis points to a system characterized by administrative backlogs, misaligned criteria, and a failure to synchronize educational outputs with industrial and vocational needs.

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The Vision: An Integrated Framework for Qualification and Career Development



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Component 1: A Dynamic, Industry-Relevant Curriculum

The proposed framework is built on a curriculum that bridges foundational knowledge with the demands of the future economy.



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Component 2: A Robust System for Validating Practical Experience

The Challenge

The current system struggles to evaluate comprehensive, portfolio-based evidence of competency outside of standardized testing.

The Proposed Solution

A formal process for the submission and evaluation of a detailed portfolio. Tshingombe's own work provides the template:

Suggested Cover Letter Elements

-  **Purpose:** Explicitly state the goal is "Recognition of qualifications, resolution of irregularities, validation of vocational experience."
-  **Summary:** Outline academic achievements, practical training, and institutional correspondence.
-  **Request:** A formal evaluation and certification based on submitted evidence.

Suggested Portfolio Format

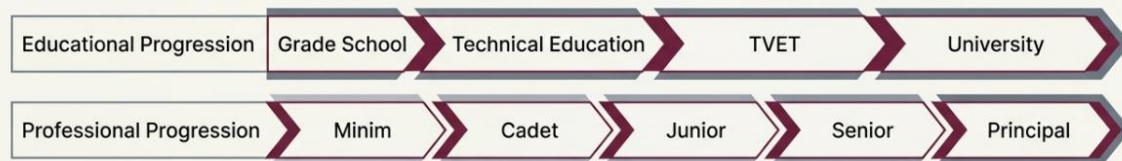
-  Clear Cover Page & Index.
-  Logical sections for transcripts, certificates, affidavits, and experimental results.

This creates a clear, auditable pathway for assessing years of accumulated practical skill and knowledge.

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Component 3: A Lifelong Career Pathway from Education to Employment

The "Career Center Discovery Framework": A developmental pathway mapping the the entire lifecycle of a technical professional.



Aptitude Testing

Assessing verbal, numerical, and abstract reasoning to guide career choices.



Résumé Builder

Tools to create polished CVs that effectively showcase skills.



Targeted Courses

Enrolling in certifications for in-demand skills to enhance professional profiles.

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A Request for Formal Evaluation and Systemic Partnership

The Immediate Ask

- A formal, comprehensive evaluation of the portfolio and qualifications of Tshingombe Tshitadi Fiston by the relevant bodies (SAQA, DHET, QCTO, ECSA).
- The purpose is the official recognition of his qualifications, validation of his extensive vocational experience, and resolution of outstanding administrative irregularities.

The Broader Vision

- To partner with grant-making institutions (like the NSF) and university review boards to review and adapt current qualification frameworks.
- The goal is to create a legitimate pathway for practitioners with deep, portfolio-based expertise to achieve formal recognition, thereby unlocking a significant pool of technical talent.

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Beyond One Case: Unlocking a Reservoir of Untapped Technical Talent

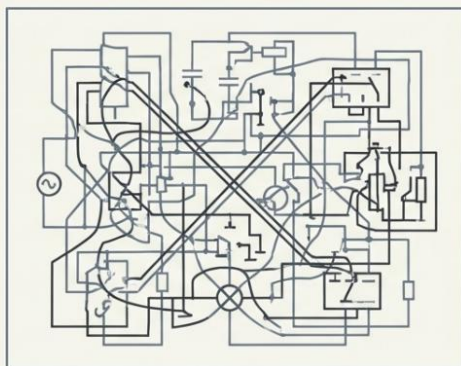


The challenges faced by Tshingombe Tshitadi Fiston are not unique. They represent a **systemic blind spot** for highly skilled individuals whose expertise has been developed through non-traditional, **practice-intensive pathways**.

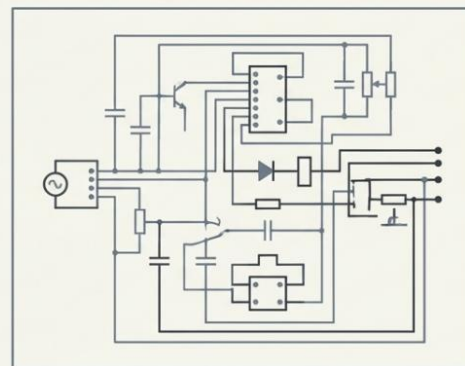
By creating a framework that can validate this type of experience, we address more than just one application; **we create a precedent and a pathway for countless other skilled practitioners**. This **directly addresses national priorities** for skills development, reduces backlogs in technical fields, and fosters a more inclusive and 'democratic liberalism' in the educational system.

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From a Tangled **System** to a Coherent **Circuit**



The Current "Irregularity System"



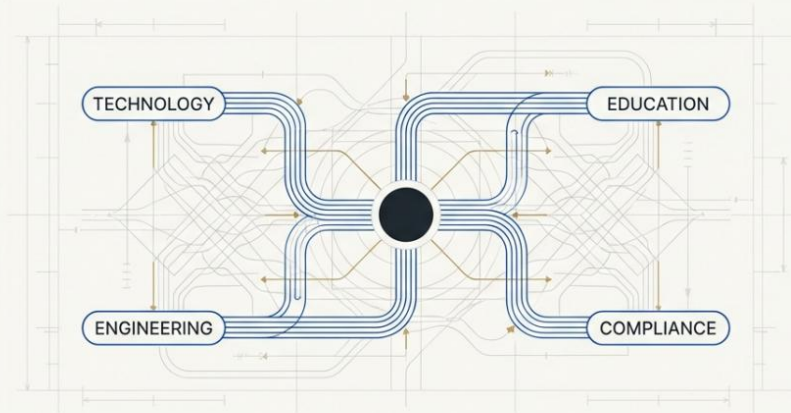
The Proposed Integrated Framework

The expertise to engineer a better system is evident.
The question is whether the system is ready to be **re-engineered**.

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The Integrated Competency Framework: Architecting a New Model for Technical Education and Professional Mastery

A Transdisciplinary Portfolio by Tshingombe Tshitadi Fiston

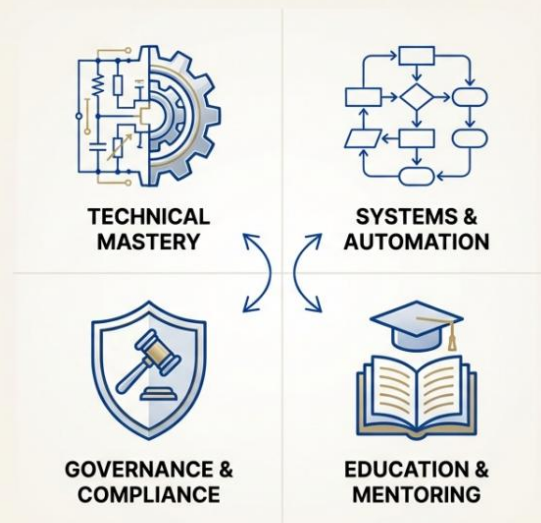


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From Siloed Skills to Integrated Systems

Today's challenges in engineering, security, and public service demand more than isolated expertise. True innovation lies at the intersection of deep technical knowledge, intelligent automation, regulatory adherence, and effective pedagogy.

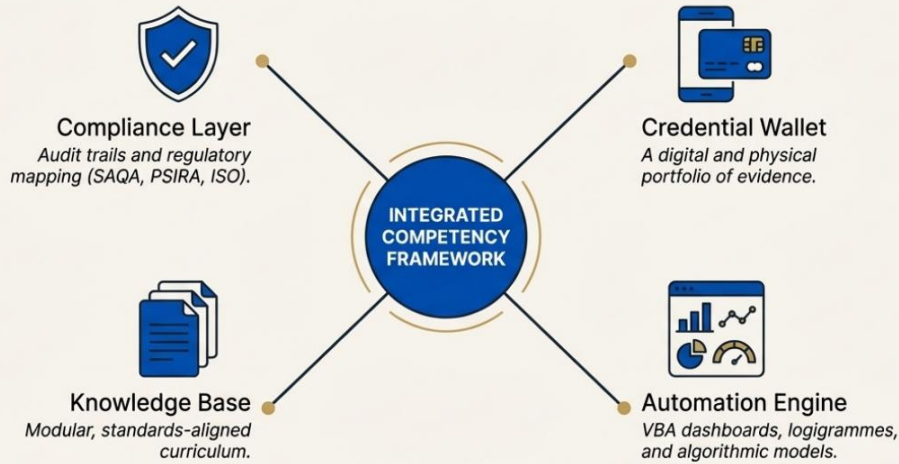
This presentation outlines a comprehensive framework designed to bridge these gaps. It's a blueprint for building, validating, and managing professional competency in a dynamic world.



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Introducing the Integrated Competency Framework (ICF)

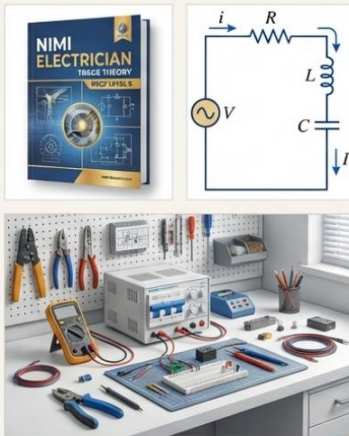
The ICF is a personal and professional ecosystem for managing the entire lifecycle of learning, application, and credentialing.



This is not just a collection of certificates; it is a living system for demonstrating verifiable, multi-domain expertise. NotebookLM

Pillar 1: Grounding Theory in Verifiable Practice

The framework is built on a foundation of rigorous engineering principles, from fundamental circuit theory to advanced systems analysis and mathematical modeling.



Curriculum Core

NSQF Level 5 Electrician Trade Theory

- Circuit Analysis: R-L-C Series & Parallel Resonance (1.6.54 - 1.6.56)
- 3-Phase AC Fundamentals: Star & Delta Connections (1.6.60 - 1.6.64)

Hands-On Application

Examples from NIMI Practical Exercises

- Exercise 4.7.207: Circuit Breaker Maintenance
- Exercise 4.1.163: Constructing Rectifiers
- Exercise 4.6.199: Jumper Fastening on Insulators

Mathematical Modeling for Real-World Problems

Total Power Output (Wind Energy):

$$P_{\text{total}} = \int_0^T P(t) dt$$

Impedance in RLC Circuit:

$$Z = \sqrt{R^2 + (X_L - X_C)^2}$$

Channel Capacity (Shannon-Hartley Theorem):

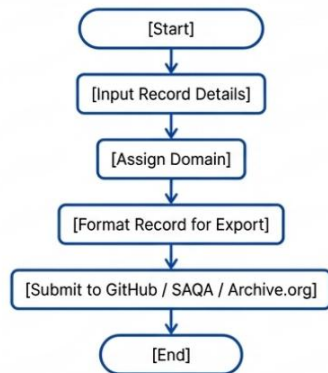
$$C = M \cdot B \cdot \log_2 (1 + \text{SNR})$$

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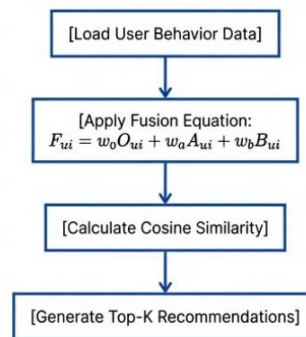
Pillar 2: Codifying Expertise into Automated Workflows

The framework uses 'Logigrammes' and 'Algorigrammes' to translate complex processes into **clear, repeatable, and auditable steps**—transforming static knowledge into dynamic systems.

Logigramme: Credential Submission Workflow



Algorigramme: Behavioral Fusion & Recommendation



This systematic approach ensures consistency, reduces errors, and makes complex decision-making transparent and auditable.

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VBA is leveraged to create powerful, integrated dashboards that manage credential tracking, case management, and real-time diagnostics.



The framework is designed to operate within and align with stringent national and international standards, ensuring all outputs are **compliant, auditable, and legally sound.**

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Case Study: Digital Certificates & Immutable Audit Trails

Using platforms like **BlockMark**, the framework provides **verifiable, time-stamped** proof of certifications and inspections, crucial for high-stakes environments like public sector tendering.

Inspection Time:
Thursday 6th March 2025 - 08:49:36(GMT)

BlockMark Registry

A certificate inspection by tshingombe tshitadi fiston

tshingombe tshitadi fiston inspected SAFETY SHIELD GLOBAL LIMITED's Cyber Essentials certificate on Thursday 6th March 2025 - 08:49:36(GMT)

Field Name	Value when inspected	Current Value	Same Value
Certificate ID	CE-12345678	CE-12345678	Yes
Organization	SAFETY SHIELD GLOBAL LIMITED	SAFETY SHIELD GLOBAL LIMITED	Yes
Certification Scheme	Cyber Essentials	Cyber Essentials	Yes
Issue Date	2024-01-15	2024-01-15	Yes
Expiry Date	2025-01-15	2025-01-15	Yes
Certification Body	IASME Consortium	IASME Consortium	Yes
Inspector ID	T-FISTON-001	T-FISTON-001	Yes
Inspection Status	Valid	Valid	Yes

Audit Trail: Compares 'Value when inspected' vs 'Current Value' to verify integrity.

Application: Validating supplier credentials for tenders (Eskom, City Power) and ensuring ongoing compliance.

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The Credential Portfolio in Action: A 360° View

This Tableau-style ledger is the single source of truth for professional competency, integrating learning, cost, and achievement into one auditable record.

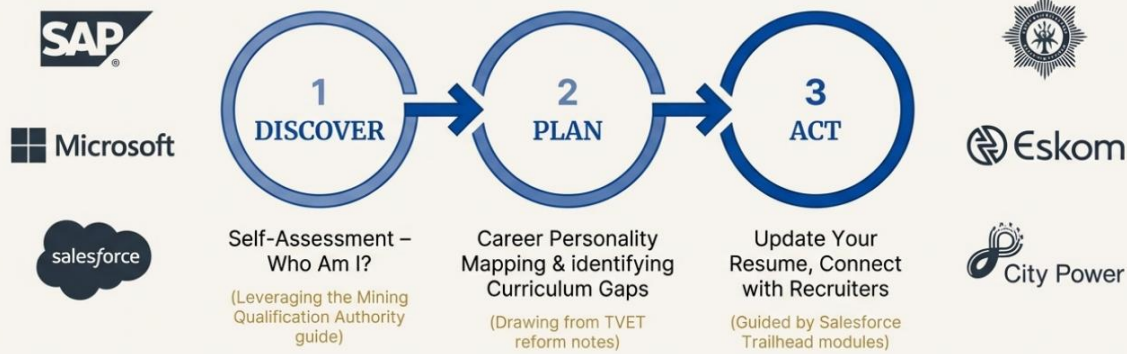
Credential Record Tableaux Line Format

Date	Institution / Platform	Item / Module	Final Cost	Award / Certificate	Integration Points
2025-10-08	Shoprite / CNA / Elektor	Elektor Starter Kit	R360	Electronics Fundamentals	GitHub + SAQA/NQF dashboard
2025-10-08	GitHub	Reward Model Deployment	\$80	Contributor Badge	GitHub + AGI Collaboration Record
2025-10-08	Sci-Bono Discovery Centre	Electrical Wiring Kit	R300	Basic Electrical Safety	SAQA/NQF Lvl 4, Portfolio LMS
2025-10-08	Eaton	Power Advantage 9PX UPS	R15,000	Power Mgmt Fundamentals	LMS + GitHub
2025-10-08	SASSETA / CCMA	Labour Law Training	R800	Dispute Resolution	MERSETA dashboard + Home Affairs

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Application: From Self-Assessment to Landing the Opportunity

The framework is not just for tracking—it's a proactive tool for career planning, mapping skills to industry needs, and preparing for high-value roles.



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Application: A Blueprint for TVET Curriculum Reform

The insights and structure from this framework can be scaled to reform TVET curricula, making them more responsive, integrated, and aligned with industry demands.

Before and After

Component	Current Status (Typical TVET)	Proposed Enhancement (ICF Model)
Trade Theory	Outdated textbooks	Smart systems, renewable energy, IoT, diagnostics
Practical Work	Fragmented exercises	Capstone projects with real-world applications
Portfolio	Rarely practiced, inconsistent	Digital/physical portfolios with documented evidence
Job Readiness	Incomplete, focus on hard skills	Embedded soft skills, standards (ISO, SANS), mock interviews

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Vision: A Scalable Model for National and Global Impact

This integrated framework provides a replicable blueprint for transforming individual careers, modernizing educational institutions, and enhancing industrial and public service capabilities.

Key Areas of Impact



Education: Creating audit-ready, credential-linked learning experiences for TVET and Higher Education (DHET, SAQA).



Industry: Enabling data-driven project management, risk analysis, and compliance for sectors like energy (Eskom), security (PSIRA), and finance (SARB).



Governance: Providing transparent, verifiable systems for public sector recruitment, certification, and accountability.



The Financial Case: From Investment to Exponential Return

The development and implementation of this framework represents a strategic investment with a significant, multi-channel return on investment.



Value is generated through enhanced employability, institutional efficiency, audit compliance, and the creation of licensable intellectual property.

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Tshingombe Tshitadi Fiston

Transdisciplinary Curriculum Architect | Technical Educator | Systems Innovator

Key Affiliations

St Peace College, DHET, City Power, SARB, Sci-Bono, SAQA, NRF, PSIRA, SASSETA.

Core Competencies

- Electrical Engineering
- Systems Automation (VBA)
- Curriculum Design & Reform
- Regulatory Compliance
- Digital Credentialing
- Forensic Analysis
- Project Management
- Cybersecurity (ISC², NIST)

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Let's Build the Future of Competency.

Available for consultation on curriculum reform, systems integration projects, and institutional accreditation strategies. Open to opportunities in engineering, security, and education technology.

Email: tshingombefiston@gmail.com

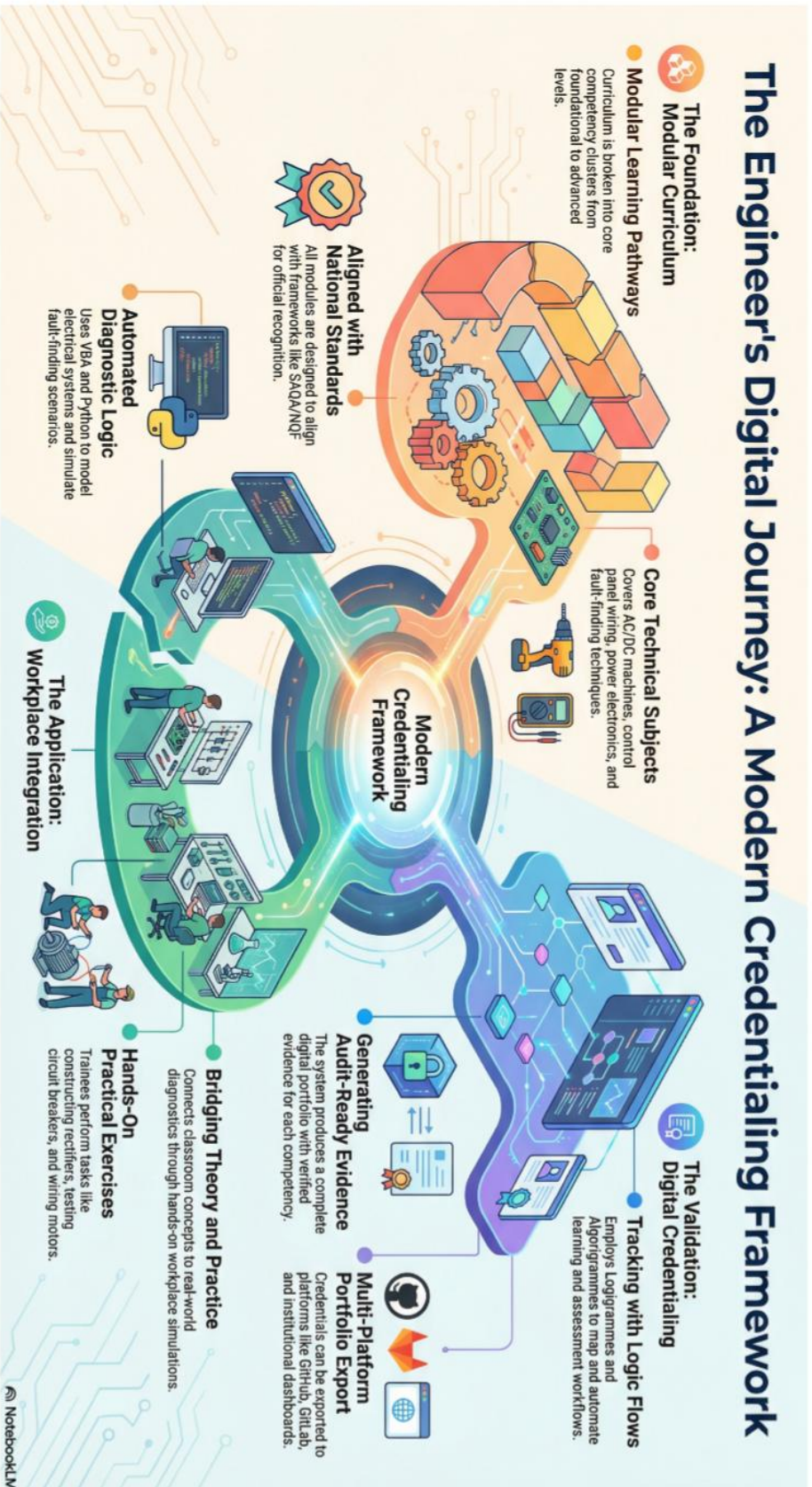
GitHub: github.com/Kananga5



Scan to view GitHub Repository

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The Engineer's Digital Journey: A Modern Credentialing Framework

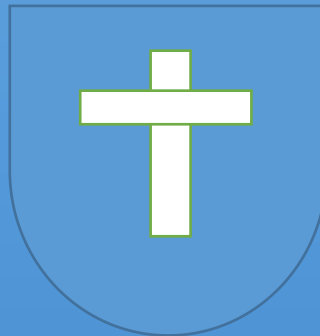


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Microsoft certificat



St peace college



Certificate

